Synthesis report of assessments of the capacity of selected National Statistical Systems to produce the core set of economic statistics

(based on assessments of Bangladesh, Bhutan and Lao People’s Democratic Republic)

September 2011

DRAFT REPORT
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Foreword

The assessments of the capacity of Bangladesh, Bhutan and Lao PDR to produce the core set of economic statistics were a joint effort by the ESCAP Statistics Division and the Bangladesh Bureau of Statistics (BBS), Bhutan National Statistics Bureau (NSB) and Lao PDR Department of Statistics (DoS) of the Ministry of Planning and Investment. The assessments were conducted under the leadership of Ms Fu, Chief of the ESCAP Statistics Division and Directors of the respective organizations.

ESCAP Statistic Division is grateful to all the staff interviewed during the respective assessment missions for their openness and support.

We also thank all the participants to the National consultative meetings on the status of core economic statistics for their contribution to the assessments.

Mr Artur Andrysiak, and Ms Jillian Campbell, Statisticians from ESCAP Statistics Division were responsible for generating this synthesis report summarizing the findings of the three assessment reports.

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Chief
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List of abbreviations and acronyms

A - Annual
ADB – Asian Development Bank
BOP - Balance of payments
CPI - Consumer price index
ESCAP - United Nations Economic and Social Commission for Asia and the Pacific
FOB - Free On Board
GDDS – General Data Dissemination System
GDI - Gross Domestic Income
GDP – Gross Domestic Product
GDP(E) – GDP by expenditure
GDP(I) – GDP income
GDP(P) – GDP by production
GFS – Government Finance Statistics
GNI – Gross national income
GNP - Gross National Product
HIES - Household Income and Expenditure Survey
ICLS - International Conference of Labour Statisticians
ICP - International Comparison Program
IIP – International Investment Position
ILO - International Labour Organization
IMF – International Monetary Fund
M - Monthly
NSO - National Statistical Office
NSS - National Statistical System
OECD - Organisation for Economic Co-operation and Development
PPI - Producer price index
PPPs - Purchasing power parities
Q - Quarterly
ROSC - Report on the Observance of Standards and Codes
SDDS - Special Data Dissemination Standard
SIAP – ESCAP Statistical Institute for Asia and the Pacific
SNA - System of National Accounts
STI - Short term indicators/statistics
UN - United Nations
W – Weekly
Executive summary

1. The assessments of the capacity of Bangladesh, Bhutan and Lao PDR to produce the core set of economic statistics were conducted (7-11 January 2011, 28-31 March 2011 and 5-8 April 2011 respectively) to ensure relevance and guide identification of priorities for the ESCAP regional programme on economic statistics and as a tool for the three National Statistical Systems (NSSs) for furthering the national strategy on economic statistics. The assessments aimed to cover all aspects of NSSs involved in the production of the core set of economic statistics; including collection and processing of data; compilation, analysis and dissemination of core set of economic statistics; statistical infrastructure (classifications, standards, frameworks, registers, IT infrastructure); human resources; and relationships between data providers and producers. The assessments identified constraints limiting the capacity of NSSs to produce the core set of economic statistics and their needs for capacity development.

2. The assessments found that the three selected statistical systems have the capacity to produce most of the statistics within the core set of economic statistics (Bangladesh 30 out of 32, Bhutan 24 of the 32, and Lao PDR 21 of the 32). The assessments further found that the three NSSs have limited capacity to produce many of these statistics at the recommended frequency (meeting core set recommendations on frequency: Bangladesh 21, Bhutan 13, and Lao PDR 16), coverage and in accordance with relevant international standards and good practices.

3. Although the three statistical systems that have taken part in the assessments operate in different settings and are in different situations, the assessments found that they experience very similar constraints and have similar capacity development needs. The assessments show that many of the constraints limiting the capacity of the three NSSs to produce the core set were common and related to: human and financial resources, training, source data, advocacy and strategic planning, business registers, IT resources, institutional agreements and coordination, quality assurance, release calendars, metadata repositories and national data pages.

4. The assessments found that:

   o The current financial and human resources place a constraint on the three NSSs. The limited financial resources and staff numbers (and their possible underutilization) significantly affect the capacity of the NSSs to collect data for, compile and disseminate the core set of economic statistics of sufficient quality and in accordance with international practices and methods. These constraints limit the capacity of NSSs to improve the existing economic statistics and implement current/modern methods and practices.

   o The limited training opportunities at the national level, limit the ability of the three NSSs to develop the statistical skills (particularly outside the National

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Statistical Offices and Central Banks) of their new staff as well as improve the skills of existing staff. The lack of necessary statistical training and knowledge of recent international standards and methods affects the capacity of the NSSs to produce economic statistics and make the necessary improvements.

- The limited availability of source data which is partly caused by limited financial and human resources is one of the main constraints affecting the capacity of the three NSS to produce the core set of economic statistics of sufficient frequency and quality. The overall quality and timeliness of statistics is significantly affected by lack of, or poor frequency of necessary survey and administrative data.
- The advocacy efforts to date have not resulted in securing the necessary resources and the strategic planning has not led to the development of the necessary capacity.
- The business registers of the three NSSs are in the early stages of development and at present are not of sufficient quality. This limits the capacity of the NSSs to conduct coherent and comprehensive business surveys.
- The computer systems of the three NSSs are in need of modernization as they inhibit efficient production of economic statistics. The overall computer systems do not appear to be well connected with the collection of data for, compilation and dissemination of economic statistics, involving many manual steps and separate computer systems.
- The coordination between the different government agencies is often based on informal arrangements, limiting the NSOs/NSSs accesses to the necessary administrative and other data in a timely and efficient manner. NSOs/NSSs depend on informal arrangements and goodwill for accessing administrative and other data from government departments. The current coordination arrangements also affect expertise sharing and resolving of discrepancies.
- Most of the organizations within the three NSSs do not at present use quality assessment frameworks to ensure the overall quality of statistics that are being produced. There are currently no systemized processes used for ensuring the overall quality of statistics.
- None of the organizations/departments responsible for dissemination of economic statistics within the three NSSs publish release calendars, affecting the overall quality of economic statistics.
- Metadata and documentation has been identified by many of the government organizations/departments as an area in need of improvement and assistance. The poor metadata and documentation affect the transparency and transfer of knowledge.
- The NSSs of Bhutan and Lao do not at present have comprehensive national summary data pages which would allow users to access all statistics from a single website, significantly affecting the accessibility and usability of economic statistics.

5. Additionally some country specific constraints were also identified and include among others constraints related to: educating data providers, strategic planning and financial year vs calendar year.
6. The findings of the three assessments are consistent with the findings of 2009 region-wide assessment\(^2\). The 2009 region-wide assessment although only focusing on a few aspects of the national statistical systems showed that many of these systems face significant financial and human constraints which together with limited training opportunities, limited data sources and ineffective business registers affect countries' capacity to produce economic statistics.

7. The three assessments demonstrated that most of the constraints faced by the selected NSSs and their need for capacity development are similar and therefore could be addressed through a regional approach. The three NSSs could benefit from the activities planned under the Regional programme for the improvement of economic statistics in Asia and the Pacific, which aims to develop the capacity of ESCAP members and associate members to produce the core set of economic statistics by 2020 of appropriate quality required for short and long-term economic analysis and decision making by both government and non-government agencies/organizations. The Regional Programme is designed around four pillars of capacity development: (a) human resource skills development; (b) a limited number of key statistical infrastructure elements; (c) methodological transparency; and (d) statistical advocacy.

8. The regional programme could assist the three NSSs in overcoming the existing constraints and would complement ongoing and planned national activities. In particular the activities under the Regional Programme components aimed at strengthening strategic planning (NSDSs or similar national strategic plans), statistical advocacy, developing human resources and improving statistical infrastructure (business registers, quality assessment frameworks, metadata repositories and other) as well as facilitating knowledge sharing and South-South cooperation would assist the three NSSs (and other countries in the region) in overcoming the constraints outlined above and would address their needs for capacity development.

I. Background

9. Many developing countries in the region lack the capacity to produce and disseminate relevant economic statistics for short and long-term economic analysis and decision-making by government and non-governmental agencies and organizations. The recent global financial and economic crises further highlighted the importance of timely, reliable, and comparable economic statistics for monitoring financial and economic changes. Recognizing that economic statistics are fundamental for managing economic development and that there is an urgent need to improve economic statistics in the Asia-Pacific region, the Committee on Statistics³ at its second session in December 2010 made a number of strategic decisions⁴.

10. The Committee endorsed a core set of economic statistics⁵ as a guideline for developing the capacity of national statistical systems. The Committee recommended that the core set be used as a framework to focus regional efforts, coordinate training and mobilize donor support for capacity-building.

11. The Committee also endorsed a proposed regional programme for the improvement of economic statistics in Asia and the Pacific⁶. The programme will serve as a roadmap until 2020 for the region to address the constraints related to producing the core set of economic statistics. The programme will facilitate the provision of technical assistance and advice in critical technical areas and will serve as an advocacy platform for national statistical systems to make a strong case for improving the fundamentals of economic statistics. The Committee encouraged ESCAP member States and development partners to actively support its implementation.

12. ESCAP is developing a detailed implementation plan for the regional programme in close consultation with member States and development partners. The implementation plan will be based, among others, on the results of a 2009 region-wide assessment⁷ of the capacity of member States to produce basic economic statistics (see Annex IV for executive summary) and detailed country assessments (see Annex I – III for executive summaries). Detailed country assessments of national statistical systems in the region (including the Bangladesh, Bhutan and Lao PDR assessments) will serve as additional

³ More information about the Committee on Statistics is available at http://www.unescap.org/stat/cst/index.asp
⁴ Decisions of the Committee are contained in the report of the ESCAP Committee on Statistics on its second session, which is available at http://www.unescap.org/stat/cst/2/index.asp.
input for better understanding the statistical process and the specific obstacles that
countries are facing with respect to the core set.
11. **Objective of the assessments and synthesis report**

13. The objective of the assessments was to assess the capacity of selected countries within ESCAP region to produce the core set of economic statistics.

14. The assessments of Bangladesh, Bhutan and Lao PDR statistical systems and the present report will provide the ESCAP Secretariat, the ESCAP Committee on Statistics (and its Bureau), the ESCAP Steering Group for the Regional Programme on Economic Statistics, and other international and regional partners with input for the further development of the implementation plan for the regional programme on economic statistics.

15. The assessments will further the national strategies for economic statistics, by helping to focus capacity building assistance which is coordinated across international organizations to meet specific gaps in the compilation of the core set.

16. The present synthesis report is intended to bring together the findings of the three assessments and identify common capacity constraints and needs for development. The findings of the report should assist in identification of priorities and most suitable approaches for the development of the implementation plan for the Regional Programme.

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III. Methodology

17. The assessments aimed to cover all aspects of the three NSS involved in the collection and processing of data for, and compilation, analysis and dissemination of the core set of economic statistics, however in practice and due to time constraints, the assessments focused on the main parts of these systems.

18. The assessments looked at all stages of production of the core set from main data providers to those responsible for compilation and dissemination of the economic statistics within the core set; users of economic statistics; and statistics development partners. The assessment also looked at human resources and the relevant statistical infrastructure including: classifications, standards, frameworks and registers.

19. The three assessments consisted of four components, namely pre-mission assessment, in-country interviews (Bangladesh 7-10 January 2011, Bhutan 28-30 March 2011 and Lao PDR 5-7 April 2011), national consultative meetings (11 January 2011, 31 March 2011 and 8 April 2011 respectively), and review of statistical publications, websites and other relevant information.

20. The principal sources of information for the reports on the assessment were the four key components of the assessments. Additional information was obtained through websites and other publications. Furthermore past assessments conducted by other organizations and information available from other international organizations were also used. Finally the National Statistics Development Strategies (Bhutan and Lao PDR) were reviewed.

21. More details about the methodology of the assessments including their limitations are available in the respective reports.
IV. Assessments findings – Capacity of the National Statistical Systems to produce the core set of economic statistics

22. The assessments found that the three selected statistical systems have the capacity to produce most of the statistics within the core set of economic statistics (Bangladesh 30 out of 32, Bhutan 24 of the 32, and Lao PDR 21 of the 32).

23. The assessments further fund that the three NSSs had limited capacity produce (at recommended frequency, in a timely manner and in accordance with recent international standards and methods): national accounts, institutional sector accounts, structural statistics, PPI, BOP, short-term indicators including on output and demand. Additionally Lao PDR and Bhutan also lacked the basic capacity to compile merchandise trade and labour cost/wage indexes as well as productivity and international investment position statistics.

24. The assessments also found that although the selected statistical systems have the basic capacity to produce most of the statistics within the core set, they have limited capacity to produce many of these statistics at the recommended frequency (Bangladesh 21, Bhutan 13, and Lao PDR 16, meeting the recommended frequency), coverage and in accordance with relevant international standards and good practices.

25. Table 1 presented below summarizes the findings of the assessments in context of the core set recommendations.

Table 1 – Availability and frequency of the Core Set of Economic Statistics in Bangladesh, Bhutan and Lao PDR

<table>
<thead>
<tr>
<th>Category of statistic</th>
<th>Recommended Frequency</th>
<th>Bangladesh</th>
<th>Bhutan</th>
<th>Lao PDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>available/meeting recommended frequency</td>
<td>32/32</td>
<td>30/21</td>
<td>24/13</td>
<td>21/16</td>
</tr>
<tr>
<td>Prices and costs</td>
<td>8/8</td>
<td>8/5</td>
<td>5/4</td>
<td>5/4</td>
</tr>
<tr>
<td>Consumer price index (CPI)</td>
<td>Q</td>
<td>M</td>
<td>Q</td>
<td>M</td>
</tr>
<tr>
<td>Producer price index (PPI)</td>
<td>Q</td>
<td>M/Q/A</td>
<td>Not compiled</td>
<td>Not compiled</td>
</tr>
<tr>
<td>Commodity price index</td>
<td>M</td>
<td>M/A</td>
<td>W</td>
<td>M</td>
</tr>
<tr>
<td>External merchandise trade price indexes</td>
<td>M</td>
<td>A</td>
<td>Not compiled</td>
<td>Not compiled</td>
</tr>
<tr>
<td>Wages / Earnings data</td>
<td>Q</td>
<td>Ad hoc (3 yearly)</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Category of statistic</td>
<td>Recommended Frequency</td>
<td>Bangladesh</td>
<td>Bhutan</td>
<td>Lao PDR</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>-----------------------</td>
<td>------------</td>
<td>---------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Labour costs index / Wage index</td>
<td>Q</td>
<td>M</td>
<td>Not compiled</td>
<td>Not compiled</td>
</tr>
<tr>
<td>Exchange rates</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Purchasing power parities (PPPs)</td>
<td>Ad hoc</td>
<td>Ad hoc</td>
<td>Ad hoc</td>
<td>Ad hoc</td>
</tr>
<tr>
<td>Demand and output</td>
<td>10/10</td>
<td>8/4</td>
<td>6/2</td>
<td>6/2</td>
</tr>
<tr>
<td>Gross Domestic Product (GDP) (production) (P) nominal and real</td>
<td>Q</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>GDP (expenditure) (E) nominal and real (including implicit price indexes for GDP(E) and components)</td>
<td>Q</td>
<td>A</td>
<td>A</td>
<td>Ad hoc</td>
</tr>
<tr>
<td>External trade – merchandise</td>
<td>M</td>
<td>M</td>
<td>A</td>
<td>Q</td>
</tr>
<tr>
<td>External trade - services</td>
<td>Q</td>
<td>M</td>
<td>Q</td>
<td>Q</td>
</tr>
<tr>
<td>Short term indicator (STI) - industry output</td>
<td>Q</td>
<td>M/A</td>
<td>A</td>
<td>Q</td>
</tr>
<tr>
<td>STI - consumer demand</td>
<td>Q</td>
<td>Not compiled</td>
<td>Not compiled</td>
<td>Q (Not published)</td>
</tr>
<tr>
<td>STI - fixed investment</td>
<td>Q</td>
<td>Ad hoc</td>
<td>Not compiled</td>
<td>Q (Not published)</td>
</tr>
<tr>
<td>STI - inventories</td>
<td>Q</td>
<td>Not compiled</td>
<td>Not compiled</td>
<td>Not compiled</td>
</tr>
<tr>
<td>Economy structure statistics</td>
<td>5-yearly or at regular intervals</td>
<td>5 yearly/Ad-hoc</td>
<td>A/10 yearly</td>
<td>Ad hoc</td>
</tr>
<tr>
<td>Productivity</td>
<td>A</td>
<td>Ad hoc</td>
<td>Not compiled</td>
<td>Not compiled</td>
</tr>
<tr>
<td>Income and Wealth</td>
<td>6/6</td>
<td>6/6</td>
<td>5/3</td>
<td>4/4</td>
</tr>
<tr>
<td>Integrated national accounts for the total economy</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Institutional sector accounts</td>
<td>A</td>
<td>A (Government only)</td>
<td>A (Government only)</td>
<td>Not compiled</td>
</tr>
<tr>
<td>Balance of payments (BOP)</td>
<td>Q</td>
<td>M</td>
<td>A</td>
<td>Q</td>
</tr>
<tr>
<td>International Investment Position (IIP)</td>
<td>A</td>
<td>A</td>
<td>Not compiled</td>
<td>Not compiled</td>
</tr>
<tr>
<td>External debt</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>M</td>
</tr>
<tr>
<td>Category of statistic</td>
<td>Recommended Frequency</td>
<td>Bangladesh</td>
<td>Bhutan</td>
<td>Lao PDR</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------</td>
<td>------------</td>
<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td>Income distribution</td>
<td>5 yearly</td>
<td>5 yearly</td>
<td>10 yearly</td>
<td>5 yearly</td>
</tr>
<tr>
<td>Money and Banking</td>
<td>3/3</td>
<td>3/3</td>
<td>3/3</td>
<td>3/3</td>
</tr>
<tr>
<td>Assets/liabilities of depository corporations</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Broad money and credit aggregates</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Interest rate statistics</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Government</td>
<td>2/2</td>
<td>2/2</td>
<td>2/2</td>
<td>2/2</td>
</tr>
<tr>
<td>General government operations</td>
<td>Q</td>
<td>M/A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>General government debt</td>
<td>Q</td>
<td>M/A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Labour Market</td>
<td>2/2</td>
<td>2/1</td>
<td>2/1</td>
<td>0/0</td>
</tr>
<tr>
<td>Labour supply and demand</td>
<td>A/Q</td>
<td>M/3 yearly</td>
<td>A</td>
<td>Not compiled</td>
</tr>
<tr>
<td>Hours worked</td>
<td>Q</td>
<td>A</td>
<td>A</td>
<td>Not compiled</td>
</tr>
<tr>
<td>Natural Resources and the Environment</td>
<td>1/1</td>
<td>1/0</td>
<td>1/1</td>
<td>1/1</td>
</tr>
<tr>
<td>Natural resources</td>
<td>A</td>
<td>Ad hoc</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>
V. Constraints, needs for capacity development and recommendations

26. The three statistical systems that have taken part in the assessments are vastly different. The Bangladesh NSS is a centralized statistical system serving a country with a total population of 148.6 million and employing a significant (when comparing with the other two systems) number of staff (with Bangladesh Bureau of Statistics alone having 4100 positions nation wide with 2800 of these currently filled). The Lao PDR NSS is a highly decentralized statistical system which currently serves a country with a total population of 6.2 million people and employs a significantly fewer staff (The Department of Statistics currently has 59 staff). Likewise, the Bhutan Statistics system is a highly decentralized system serving a country with a total population of just 730 thousands people with the National Statistical Bureau employing a total of 60 staff.

27. At the same time, while Bhutan and Bangladesh statistical systems appear to be well established with roles of all involved agencies clarified (or at least well understood), the Lao PDR NSS is in a middle of major restructure including among other renaming and repositioning the NSOs and moving around major statistical responsibilities. Despite the very different settings within which the three statistical systems exist and their current situations, the analysis of the results of the three assessment found that they experience very similar constraints and have similar capacity development needs.

28. The assessments found that the three selected NSS have the capacity to produce most of the statistics within the core set but have limited capacity to produce many of these statistics at the recommended frequency and in accordance with relevant (current) international standards and good practices. The assessment also found that three NSSs have limited capacity to make the necessary improvements, including among others: implementing recent international standards, methods and classifications, addressing coverage gaps, addressing data gaps and quality to improve timeliness and frequency of statistics, etc.

29. Presented below are constraints that have been identified as limiting the capacity of the three NSSs to produce economic statistics and make the necessary improvements. Executive summaries of the detailed country reports providing more information on these issues are presented in Annex I, II and III.

30. Presented below are also needs for capacity development and some recommendations in this regard that would assist the three NSSs in overcoming the constraints identified in the assessments and could guide the development of the implementation plan for the Regional Programme.

31. The chapter is divided into two sections: “Common …” that is those constraints and needs that all three or at the very least two out of the three statistical systems have in common, and “Country specific….,” that is those that are unique to a particular NSS but
could potentially also be an issue for other countries in the region which did not take part in the assessments.

A. Common constraints and needs for capacity development and recommendations in that regard

a. Human resources

32. Despite their differences in size, all three NSS which participated in the assessments described their current staff numbers as insufficient, limiting their capacity to collect data for, compile and disseminate the core set of economic statistics of sufficient quality and in accordance with international practices and methods. The NSSs indicated that the staff constraint makes it very difficult to improve the existing economic statistics and apply modern methods and practices. Likewise, the staff constraint makes compilation of additional statistics (such as quarterly GDP or BOP) very challenging as given the time intensive nature of sub-annual statistics, there is no capacity (available staff) to dedicate for these activities. There is a need for advocacy to raise the awareness of the policy-makers of the importance of the improvement of existing and compilation of new economic statistics to secure the necessary resources. As well as advocacy there is also a need to ensure that the National Statistical Development Strategies (NSDSs) and similar statistical capacity development planning tools of NSSs include a clear strategy for development of the necessary capacity for producing the Core Set.

33. The three NSSs need to take a more pro-active role in raising the awareness of policy-makers and other statistics users of the importance of economic statistics and ensuring that the long-term strategies are developed accordingly. The Regional Programme could assist the NSSs through training on and other assistance including development of common advocacy tools to raise the awareness among the policy-makers of the importance of investing in the improvement of economic statistics as well as assisting countries with the development of comprehensive NSDSs or similar national strategic plans.

34. The three NSSs could also benefit from looking more closely at practices of other NSSs in the region to assess whether their existing resources could be better utilized including through the use of modern practices and better IT solutions. The Regional Programme could assist in promoting good international practices in this area and facilitating study tours/exchange of experiences.

b. Training

35. With the exception of Bangladesh NSS, the Bhutan and Lao PDR NSSs do not at present have a dedicated statistical training institute or a central statistical training unit
responsible for a provision of training to all their staff members. The statistical training received, including access to international training as well as level of statistical skills and knowledge vary greatly across the different organizations/divisions which form respective NSSs.

36. There is a strong demand from most organizations/departments of all three NSSs for a coordinated approach to provision of statistical training. There is a need for the NSOs (in coordination with other relevant organizations) to establish a long-term strategy (including through NSDS) for development of human resources including regular statistical training to raise the knowledge and improve skills of statistical staff across the NSSs including staff working at the regional offices. To guide a staff skills development a skills framework could be adopted such as SIAP’s Core Skills Framework9.

37. The Regional Programme could assist the NSSs through provision of technical assistance and advice in developing a long-term plan for capacity building including a plan for establishment of a dedicated training section/unit or in case of Bangladesh strengthening the Training Academy. Learning from other statistical systems in the region, could assist the three NSSs in developing strategies for sustainable national training programmes. NSSs could also benefit from access to training materials of other national and international training organizations.

38. In addition to addressing the basic statistical training needs of new staff, a policy is needed to address the training needs of mid and high level staff including specific training on new international standards and methods (SNA 2008, IRIS2008 and IRIIP2010, quarterly GDP, regional accounts, produce price indices and short-term economic statistics etc). The Regional Programme could assist the NSSs through provision/facilitation of a combination of national and international training programmes as well as staff exchanges with other countries to address these needs.

c. Financial resources

39. Most of the agencies from the three countries which have participated in the assessments stated that the current financial resources available to them were not adequate. There is a need for advocacy to ensure that necessary resources are available to collect the required data and make the necessary improvements including implementation of current international standards and methods. At the same time, as with the human resources, the NSSs need to assess very closely whether the current financial resources could be stretched further (or utilized more efficiently) through use of modern practices and methods and better IT solutions.

40. As with human resources, the Regional Programme could assist the NSSs through training and other assistance in developing advocacy tools to raise the awareness among the policy-makers of importance of investing in the improvement of economic statistics.

9 More information on SIAP Core Skills Framework is available at http://www.unsiap.or.jp/about_siap/coreskill.php
and with the development of comprehensive long-term strategies. The Regional Programme could also assist in promoting modern practices and methods and more efficient IT solutions.

d. Advocacy and strategic planning

41. All three statistical systems appear to have limited financial and staff resources. The lack of necessary resources including in the case of human resource lack of training appears to significantly affect their capacity to collect data for, compile and disseminate the core set of economic statistics. It is clear that advocacy efforts to date have not resulted in securing the necessary resources and the strategic planning has not led to the development of the necessary capacity. There is a need for strong advocacy efforts to secure the necessary resources and for the development of the comprehensive national strategic plans providing for the development of national capacity to produce the core set of economic statistics.

42. Policy-makers need to understand the importance of timely, high quality economic statistics and ensure sufficient resources are made available to the NSSs. To achieve this, the three NSSs will need to take a more pro-active role in raising the awareness of policy-makers and data users of the importance of economic statistics and developing comprehensive long-term plans. The Regional Programme could assist the NSSs through assisting countries in improving their current advocacy methods and approaches (through training, technical assistance and facilitating of exchange of country experiences and knowledge) and giving them access to standard advocacy tools which could be developed for the region as a whole. The Regional Programme could assist the NSSs with full integration in NSDSs or similar national strategic plans of the development of national capacity to produce the core set of economic statistics.

e. Sources

43. The limited availability of source data is one of the main constraints affecting the capacity of the three NSSs to produce the core set of economic statistics of sufficient frequency and quality. The limited availability of source data can be partly attributed to limited financial and human resources. The lack of high frequency timely survey data presents a significant challenge to the all three NSSs. The overall quality and timeliness of statistics is significantly affected by lack of, or poor frequency of necessary survey data.

44. In addition to assistance related to advocacy and strategic planning, the Regional Programme could assist the NSSs through provision of training, technical assistance and facilitating of sharing of experiences in developing timely, cost effective and efficient data collections. NSSs could also significantly benefit from training on modern data editing techniques and use of IT solutions for that purpose.
45. As with survey data, access to administrative data sources from both non-government and government sources appears to be a constraint limiting the capacity of NSSs to produce economic statistics. The access to government data needs to be fully mandated and should not depend on personal relationships. Furthermore, efforts should be made to ensure in the future NSOs are able to influence (where possible, through training, advocacy, advice, etc) administrative data collections, so that the data collected by various government departments is of sufficient quality and suits the statistical needs of the NSSs.

46. There is a need to raise the awareness of these providers of the importance of their data. If possible, legal means/provisions should also be provided to the NSOs to collect such key administrative data. In addition to raising awareness, the Regional Programme could also assist the NSOs through provision of training, technical assistance and facilitating of sharing of experiences between countries on utilizing more effectively the existing administrative data sources and getting access to and developing new sources. The Regional Programme could also assist countries in developing long-term strategies for establishing the necessary data collections, ensuring that their frequency (at least in the longer-term) permits also compilation of sub-annual statistics.

f. Business Registers

47. The business registers of all three statistical systems are in the early stages of development and at present are not of sufficient quality. This limits the capacity of these NSSs to conduct coherent and comprehensive business surveys.

48. Given the central role that business register plays in ensuring that all relevant surveys are conducted in a coherent and consistent manner there is a clear and urgent need for an improvement of the business registers. The business registers need to be improved to ensure that they contain up-to-date information on all the establishments (and ideally enterprises) involved in economic activity in the three NSSs. Available administrative data sources need to be utilized to ensure that the information in the business register is up-to-date. Once the business registers are of sufficient quality, the organizations need to ensure that all relevant surveys are conducted using samples selected from the business registers, ensuring consistency across different surveys.

49. The Regional Programme could assist the NSSs through provision of technical assistance and international training in the area of business registers. Additionally NSSs could benefit from study tours or staff exchanges with other national statistical offices to allow their staff to learn good practices and methods followed by other organizations. NSSs staff could also benefit from learning from other national statistical offices on the use and maintenance of business registers. Given the size of this problem and the key nature of business registers, consideration could also be given to establishing a regional forum for business register experts to permit them regular exchange of knowledge and experience and facilitate development of regional methods and practices.
g. IT resources

50. The computer systems of all three statistical systems are in need of modernization as they inhibit efficient production of economic statistics. Although most staff have access to computers, the overall computer systems do not appear to be well connected with the collection of data for, compilation and dissemination of economic statistics, involving many manual steps and separate computer systems. In many cases the survey results are entered and processed manually and are often transmitted on paper. Likewise, administrative data is often received on paper, CD or through other means. Excel spreadsheets are often the most common way of compiling statistics, presenting the risks of file corruption and incorrect links.

51. There is a need for a coordinated approach to the modernization of statistical systems to ensure that staff have the necessary software to compile the statistics, data warehouses to collect and store the statistics and networks to effectively and efficiently communicate them across different organizations and public. Given the significant costs involved in these sorts of improvements, the Regional Programme could play an important role in facilitating a regional approach to development of IT solutions, promoting common tools and IT systems as well as assisting in sharing of experiences with other national statistical systems in the region and beyond.

h. Institutional agreements and coordination

52. There appears to be a high level of cooperation and coordination between the different government organizations involved in the production of economic statistics within the three NSSs, with good working relationship between all the organizations involved. However in almost all instances the data sharing arrangements between different government agencies are currently not formalized limiting the NSOs/NSSs access to the necessary administrative data in a timely and efficient manner. NSOs/NSSs depend on informal arrangements and goodwill for accessing administrative data from other government departments. Furthermore NSOs have no input in structuring administrative data collections, limiting their use to the statistical system.

53. Significant amount of data sharing is done using hard copy publications, via email or using CDs. Data sharing between different organizations needs to be streamlined to increase its timeliness, avoid unnecessary duplication of work and permit resolving of discrepancies. The Regional Programme could assist the NSSs through facilitating of sharing of experiences and promoting IT solutions on efficient data sharing and transfer.

i. Quality assurance

54. Almost all organizations within the three NSSs do not at present use quality assessment frameworks to ensure the overall quality of statistics that are being produced. Although every effort is being made to ensure a very high quality of statistics, there are
currently no systemized processes used for ensuring the overall quality of statistics. Only basic checks and validations are applied such as cross checking of values, etc to ensure the accuracy of data.

55. There is a need for the NSSs to adopt and use quality assessment frameworks (such as IMF’s DQAF) to ensure the overall quality of statistics that are being produced. Furthermore discussion needs to take place to clarify the role of the NSOs as a quality assurance provider, as many organizations currently depend (in particular in Bhutan) on NSOs for quality assurance.

56. The Regional Programme could assist the NSSs through technical assistance in implementing and training on the use of quality assessment frameworks as well as exchange of experiences with other national statistical offices permitting its staff to learn how such frameworks are currently used by other countries to ensure the quality of statistics.

j. Release calendars

57. None of the organizations/departments responsible for dissemination of economic statistics within the three NSSs publish release calendars. All of the statistics currently published by the organizations within the three NSSs are done so in accordance with internal guidelines stating the number of days/weeks/months after the reference period within which the statistics are to be made public. In some instances not even such guidelines exists, with publication taking place when statistics are available.

58. Release calendars should be made available to the public in advance to ensure transparency and raise the profile of official statistics. The Regional Programme could assist the NSSs through facilitating of sharing of experiences between countries on how release calendars can be established and set deadlines met.

k. Metadata repositories

59. The issue of metadata and documentation has been identified by many of government organizations/departments within the three NSSs as an area in need of improvement and assistance. Many of these organizations do not have a regular process for documenting current methods and practices and lack the necessary infrastructure to share the metadata with users.

60. There is a need to assist these organizations with development of necessary metadata and documentation. To ensure transparency of methods and practices and inform users of the current limitations of statistics, the NSSs need to ensure that the metadata available both from national and international websites and other sources is up-to-date and easily accessible. To ensure effective transfer of knowledge NSSs also need to ensure that internal practices and methods are well documented and easily accessible.
The Regional Programme could assist the NSSs through provision of technical assistance, training and facilitating sharing of experiences between countries on the development and use of metadata repositories.

I. Statistical mandate

61. Both Bhutan and Bangladesh NSSs do not have statistical laws. The statistical laws of the two countries have been designed and are currently being enacted.

62. The current legal mandate of the two NSOs in those countries is limited and does not comprehensively and clearly specify the role of the NSO limiting is ability to fully fulfill its function. The legal basis for NSOs to conduct surveys is limited. NSOs do not have a clear legal mandate to collect all the necessary survey data.

63. Although the NSS of Lao PDR has a new statistical law, at present that law is not yet followed in practice.

m. National data page

64. The NSSs of Bhutan and Lao PDR are highly decentralized statistical system with a number of organizations responsible for dissemination of economic statistics within the core set. At present the two NSSs do not have comprehensive national summary data pages (even though the NSS of Bhutan subscribes to the GDDS) which would allow users to access all statistics from a single website. This means that users have to spend considerable amounts of time browsing through the websites of different organizations to access the core set of economic statistics, significantly affecting the accessibility and usability of economic statistics.

65. There is a need to establish a single data portals/websites to disseminate (or at least provide links to) all the economic statistics (or ideally all official statistics). Users should be able to easily locate and access the necessary information. Such websites would also benefit statistics providers as they would raise the public awareness of statistics and possibly the profiles of the organizations. Furthermore efforts should be made to ensure that statistics are published in a more user friendly (easily downloadable) format permitting easy data coping and manipulation (such as CSV, etc).

66. NSSs could benefit from technical assistance and training on establishing such a data portals/data pages. NSSs could further benefit from exchange of experiences with SDDS/GDDS subscribing countries many of which maintain very good user friendly data pages.
B. Country specific constraints and needs for capacity development and recommendations in that regard

a. Educating data providers (Bangladesh)

67. The response rate to many surveys appears to be affected by the lack of awareness of respondents that all provided data will be kept strictly confidential and no individual unit records will be shared with other government departments and in particular the revenue office.

The Bangladesh NSO needs to take a more active role in raising the awareness of data providers, to improve overall response rate/access to data and its accuracy through increasing their awareness of the importance of statistics. The NSO could benefit from training, exchange of experiences with other national statistical offices and possibly technical assistance in raising the awareness of the importance of statistics including economic statistics. Providers, users and general public need to understand that NSO is fully independent and any information shared with it or other parts of NSS will be treated with care and confidentiality and will not be shared with the revenue office.

b. Financial year vs calendar year (Bhutan)

68. The BOP statistics, government statistics and most of the other statistics are compiled on financial year basis (July - June) while the National Accounts are compiled on calendar year basis (Jan - Dec). This difference in the definition of the year provides a significant challenge for users of statistics who wish to obtain a more comprehensive picture of the economy.

69. The lack of quarterly BOP, government and national accounts statistics is at the core of this issue as users are unable to compile their own annual statistics and are forced to use such techniques as average of the last 2 years to be able to analyze the BOP data along the national accounts and government statistics. There is an urgent need for correcting this situation through providing all of these statistics on a common year basis (or ideally compiling quarterly statistics) or if no consensus can be reached providing these statistics on both calendar and financial year basis.

70. The NSS could benefit from technical assistance and training to assist it with developing in the future quarterly national accounts and BOP statistics. However as this will require additional resources and data sources it might take some time before these statistics can be produced on sub-annual basis. In the shorter term the NSS could benefit from technical assistance as well as exchange of knowledge with other countries in a similar situation. A method (more sophisticated than the current method of averaging 2 years) needs to be developed and implemented as soon as possible.
C. Links with the Regional Programme for the improvement of economic statistics in Asia and the Pacific

71. The three assessments demonstrated that many of the constraints faced by the selected NSSs and their needs for capacity development are similar and therefore could be addressed through a regional approach. The three NSSs could potentially benefit from the activities planned under the Regional Programme.

72. The primary aim of the Regional Programme is to develop the capacity of ESCAP members and associate members to produce the core set of economic statistics by 2020 of appropriate quality required for short and long-term economic analysis and decision making by both government and non-government agencies/organizations. The Regional Programme is designed around four pillars of capacity development: (a) human resource skills development; (b) a limited number of key statistical infrastructure elements; (c) methodological transparency; and (d) statistical advocacy.

73. The Regional Programme contains 7 key components, ranging from standard setting, to statistical advocacy, capacity development and programme monitoring and knowledge sharing, as summarized in Table 2.

<table>
<thead>
<tr>
<th>Number</th>
<th>Components/Subcomponents</th>
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<tbody>
<tr>
<td>1</td>
<td>Endorsement of the Core Set as regional guideline</td>
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<tr>
<td>2</td>
<td>Strengthening of statistical advocacy</td>
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<tr>
<td>3</td>
<td>Development of human resource skills</td>
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<tr>
<td>4</td>
<td>Improvement of statistical infrastructure</td>
</tr>
<tr>
<td>4.1</td>
<td>Adoption of internationally recognized quality assessment frameworks</td>
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<tr>
<td>4.2</td>
<td>Development of metadata repositories</td>
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<tr>
<td>4.3</td>
<td>Development of business registers</td>
</tr>
<tr>
<td>4.4</td>
<td>Adoption of modern statistical data editing techniques</td>
</tr>
<tr>
<td>5</td>
<td>Improvement in coordination</td>
</tr>
<tr>
<td>6</td>
<td>Progress monitoring and programme review</td>
</tr>
<tr>
<td>6.1</td>
<td>Monitoring the progress in national capacity development</td>
</tr>
</tbody>
</table>
74. As discussed in the previous section, it is evident that a number of components of the Regional Programme is directly relevant to the Bangladesh, Bhutan and Lao PDR NSSs and if implemented would help to address their needs for capacity development and would help overcome some of the constraints that have been identified in the assessments.
VI. Conclusion

75. The three statistical systems that have taken parts in the assessments are vastly different. While the Bangladesh NSS is a centralized statistical system serving a country with a total population of 148.6 million, both Bhutan and Lao PDR NSSs are highly decentralized systems serving much smaller populations (6.2 and 0.7 million respectively). At the same time while Bhutan and Bangladesh statistical systems appear to be well established with roles of all involved agencies clarified (or at least well understood), the Lao PDR NSS is in a middle of a major restructure including among other renaming and repositioning of the NSOs and moving around major statistical responsibilities. Despite the very different settings within which the three statistical systems exist and their current situation, the three assessments showed that they experience very similar constraints and have common capacity development needs.

76. The assessments found that the three selected statistical systems have the capacity to produce most of the statistics within the core set of economic statistics (Bangladesh 30 out of 32, Bhutan 24 of the 32, and Lao PDR 21 of the 32). The assessments further found that the three NSSs have limited capacity to produce many of these statistics at the recommended frequency (Bangladesh 21, Bhutan 13, and Lao PDR 16 meeting the recommended frequency), coverage and in accordance with relevant international standards and good practices.

77. Based on the interviews with statistics providers and users and the discussions during the three consultative meetings the assessments found that improving/developing the capacity of the NSSs to produce (at recommended frequency, in a timely manner and in accordance with recent international standards and methods): national accounts (including quarterly GDP E and P), institutional sector accounts, structural statistics, PPI, BOP, IIP, short-term indicators on output, demand and merchandise trade and labour cost/wage indexes was a priority.

78. Addressing these priorities will depend on the ability of the three NSSs to address some of the constraints identified in the assessments, most of which are common to all three NSSs and related to: human and financial resources as well as advocacy and strategic planning, training, source data, business registers, IT resources, institutional agreements and coordination, quality assurance, release calendars, metadata repositories and national data pages. Additionally some country specific constraints will also have to be addressed including: educating data providers and financial year vs calendar year.

79. The current financial and human resources place a significant constraint on all three NSSs. The limited financial resources and staff numbers significantly affect the capacity of the selected NSSs to collect data for, compile and dissemination core set of economic statistics of sufficient quality and in accordance with international practices and methods. The financial resources available to agencies which have participated in the assessment are not adequate. In particular the lack of financial resources for organizations...
which are responsible for conducting of surveys limits their capacity to collect the necessary data. The staff constraint limits the capacity of NSSs to improve the existing economic statistics and implement current/modern methods and practices. The staff constraint also makes compilation of additional statistics (such as quarterly GDP or short-term economic statistics) very challenging. It is also clear that advocacy efforts of the three NSS have to date have not resulted in the necessary resources and there is a need for strong advocacy efforts to secure those necessary resources. Likewise the strategic planning has not led to the development of national capacity to produce the necessary economic statistics and there is a need for the development of the comprehensive national strategic plans providing for doing so. At the same time, there is a need for the NSSs to assess very closely whether the current human and financial resources could be stretched further (utilized more efficiently) through use of modern practices and methods and better IT solutions.

80. The limited training opportunities at the national level limit the ability of the three NSSs to effectively and efficiently develop the statistical skills (particularly outside the NSOs and Central Banks) of their new staff as well as improve the skills of existing staff. The lack of necessary statistical training and knowledge of recent international standards and methods affects the capacity of these NSSs to produce economic statistics and make the necessary improvements. There is a strong demand from most organizations within the three NSSs for a coordinated approach to provision of statistical training including establishment a long-term strategy for development of human resources including regular statistical training to raise the knowledge and improve skills of statistical staff across the NSSs.

81. The limited availability of source data is one of the main constraints affecting the capacity of the three NSSs to produce the core set of economic statistics of sufficient frequency and quality. The lack of high frequency timely survey data presents a significant challenge to the NSSs. The overall quality and timeliness of statistics is significantly affected by lack of, or poor frequency of necessary survey data. As with survey data, access to administrative data sources from both non-government and government sources appears to be a constraint limiting the capacity of NSSs to produce economic statistics. There is a need for a long-term strategy (including through NSDS) for establishing the necessary data collections, ensuring that their frequency (at least in the longer-term) permits also compilation of sub-annual statistics.

82. The business registers of the three NSSs are in the early stages of development and at present are not of sufficient quality. This limits the capacity of the NSSs to conduct coherent and comprehensive business surveys. Given the central role that business registers play in ensuring that all relevant surveys are conducted in a coherent and consistent manner there is a clear and urgent need for an improvement of the three business registers. The business registers need to be improved to ensure that they contain up-to-date information on all the establishments (and ideally enterprises) involved in the economic activity in the three countries. Available administrative data sources need to be utilized to ensure that the information in the business registers is up-to-date.
83. The computer systems of the three NSSs are in need of modernization as they inhibit efficient production of the economic statistics. Although most staff have access to computers, the overall computer systems do not appear to be well connected with the collection of data for, compilation and dissemination of economic statistics, involving many manual steps and separate computer systems. In many cases the survey results are often transmitted on paper or through other non-automated means. Likewise, administrative data is often received on paper, CD or through other non-automated means. Excel spreadsheets are often the most common way of compiling statistics, presenting the risks of file corruption and incorrect links.

84. Data sharing arrangements between different government agencies are currently not formalized limiting the NSOs/NSSs access to the necessary administrative data in a timely and efficient manner. NSOs/NSSs depend on informal arrangements and goodwill for accessing administrative data from other government departments. Furthermore NSOs have no input in structuring administrative data collections, limiting their use to the statistical system. The current coordination arrangements also affect expertise sharing and resolving of discrepancies.

85. Most of the organizations within the three NSSs do not at present use quality assessment frameworks to ensure the overall quality of statistics that are being produced. Although every effort is being made to ensure a very high quality of statistics, there are currently no systemized processes used for ensuring the overall quality of statistics. Only basic checks and validations are applied such as cross checking of values, etc to ensure the accuracy of data.

86. None of the organizations/departments responsible for dissemination of economic statistics within the three NSSs publish release calendars. All of the statistics currently published by the organizations within the three NSSs are done so in accordance with internal guidelines stating the number of days/weeks/months after the reference period within which the statistics are to be made public. In some instances not even such guidelines exists, with publication taking place when statistics are available.

87. The issue of metadata and documentation has also been identified by a number of government organizations/departments within the three NSSs as an area in need of improvement and assistance. Some of these organizations do not have a regular process for documenting current methods and practices. To ensure transparency of methods and practices and inform users of the current limitations of statistics, the NSSs need to ensure that the metadata available both from national and international websites and other sources is up-to-date and easily accessible.

88. The NSSs of Bhutan and Lao do not have comprehensive national summary data pages (even though the NSS of Bhutan subscribes to the GDDS) which would allow users to access all statistics from a single website. This means that users have to spend considerable amounts of time browsing through the websites of different organizations to access the core set of economic statistics, significantly affecting the accessibility and usability of economic statistics. There is a need to establish a single data portals/websites...
to disseminate (or at least provide links to) all the economic statistics (or ideally all official statistics). Users should be able to easily locate and access the necessary information.

89. The findings of the three assessments are consistent with the findings of 2009 region-wide assessment. The 2009 region-wide assessment although only focusing on a few aspects of the national statistical systems showed that many of these systems face significant financial and human constraints which together with limited training opportunities, limited data sources and ineffective business registers affect countries capacity to produce economic statistics.

90. The three assessments demonstrated that most of the constraints faced by the selected NSSs and their need for capacity development are similar and therefore could be addressed through a regional approach. The three NSSs could benefit from the activities planned under the Regional programme for the improvement of economic statistics in Asia and the Pacific.

91. The primary aim of the Regional Programme is to develop the capacity of ESCAP members and associate members to produce the core set of economic statistics by 2020 of appropriate quality required for short and long-term economic analysis and decision making by both government and non-government agencies/organizations. The Regional Programme is designed around four pillars of capacity development: (a) human resource skills development; (b) a limited number of key statistical infrastructure elements; (c) methodological transparency; and (d) statistical advocacy.

The regional programme could assist the three NSSs in overcoming the existing constraints and would complement ongoing and planned national activities. In particular the activities under the Regional Programme components aimed at strengthening strategic planning (NSDSs or similar national strategic plans), statistical advocacy, developing human resources and improving statistical infrastructure (business registers, quality assessment frameworks, metadata repositories and other) as well as facilitating knowledge sharing and South-South cooperation would assist the three NSSs (and other countries in the region) in overcoming the constraints outlined above and addressing their needs for capacity development.
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Lao Customs Department (http://laocustoms.laopdr.net)

MoAF - Ministry of Agriculture and Forestry (www.maf.gov.la)
MoF – Ministry of Finance (www.mof.gov.la/)
MoIC – Ministry of Industry and Commerce (www.moc.gov.la/)
National Agriculture and Forestry Research Institute (www.nafri.org.la/)
Annex I. Executive summary of Bangladesh assessment

92. The assessment of the capacity of Bangladesh to produce the core set of economic statistics was conducted to ensure relevance and guide identification of priorities for the ESCAP regional programme on economic statistics and as a tool for Bangladesh for furthering the national strategy on economic statistics. The assessment aimed to cover all aspects of Bangladesh Statistical System (BSS) involved in the production of the core set of economic statistics; including collection and processing of data; compilation, analysis and dissemination of core set of economic statistics; statistical infrastructure (classifications, standards, frameworks, registers, IT infrastructure); human resources; and relationships between data providers and producers. The assessment identified constraints limiting the capacity of BSS to produce the core set of economic statistics and needs for capacity development.

93. The development of this assessment consisted of 4 components: pre-mission analysis; in-country interviews; national consultative meeting; and research and reporting. The assessment focused on the three main parts of the BSS including: Bangladesh Bureau of Statistics (BBS), Bangladesh Bank (BB), and Bangladesh Ministry of Finance (MOF). The interviews were conducted on January 7-10, 2011 and the national consultative meeting was on 11 January 2011.

94. The assessment found that the BSS is currently able to produce 30 out of 32 of the statistics within the core set with the majority (20) meeting the core set recommendations on frequency. The assessment further found that although the BSS has the basic capacity to produce most of the statistics within the core set, it has limited capacity to produce many of these statistics in accordance with relevant international standards and good practices.

95. The assessment found that the capacity of BSS to produce the core set of economic statistics was constrained by statistical mandate, financial and human resources including access to training, data sources, business registers, statistical information systems, quality assurance frameworks and data editing techniques, as follows:

- The current legal mandate of the BBS is limited and does not comprehensively and clearly specify the role of the BBS including its role in the coordination of statistical activities in the country, limiting its ability to fully fulfill its function.
- The current limited financial and staff resources place a constraint on the BSS and in particular the BBS by limiting its capacity to collect survey data on sub-annual basis in a timely manner, compile economic statistics with recommended frequency and in accordance with latest international standards and good practices.

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The current recruitment policy affects the ability to hire new staff and results in significant number of unfilled positions further limiting the capacity of BSS to fulfil its function.

The limited training opportunities at the national level, limit the ability of BSS to effectively and efficiently develop the statistical skills of its new staff as well as improve the skills of existing staff.

The lack of necessary survey data and in particular sub-annual data and limited access to administrative data affect the frequency and quality of economic statistics.

The BBS business register is in the early stages of development and at present is not sufficient to be used for all economic surveys.

The BSS statistical information systems (and in particular those of BBS) are in need of modernization as the existing systems inhibit transfer of data and efficient compilation and dissemination of statistics.

The lack of use of quality assurance framework and modern data editing techniques affects the quality and timeliness of statistics.

Bangladesh is currently in the process of strengthening its national statistical system to ensure that it has the capacity to produce the necessary statistics including economic statistics. A number of ongoing and planed initiatives aimed at improving the national statistical system will address some of the constraints identified in the assessment.

Although the BSS has a plan for addressing some of the constraints identified above, it could benefit substantially from the activities planned under the Regional programme for the improvement of economic statistics in Asia and the Pacific. The Regional Programme has a number of components, including components aimed at improving human resources, business registers, quality assessment frameworks, metadata repositories and other through capacity building activities, technical assistance and facilitating sharing of knowledge. The regional programme could assist the BSS in overcoming the existing constraints and would complement ongoing and planed national activities.

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Annex II. Executive summary of Bhutan assessment

98. The assessment of the capacity of Bhutan to produce the core set of economic statistics was conducted to ensure relevance and guide identification of priorities for the ESCAP regional programme on economic statistics and as a tool for Bhutan for furthering the national strategy on economic statistics. The assessment aimed to cover all aspects of Bhutan Statistical System (BSS) involved in the production of the core set of economic statistics; including collection and processing of data; compilation, analysis and dissemination of core set of economic statistics; statistical infrastructure (classifications, standards, frameworks, registers, IT infrastructure); human resources; and relationships between data providers and producers. The assessment identified constraints limiting the capacity of BSS to produce the core set of economic statistics and needs for capacity development.

99. The development of this assessment consisted of 4 components: pre-mission analysis; in-country interviews; national consultative meeting; and research and reporting. The assessment focused on the main parts of the BSS including: Bhutan National Statistics Bureau (NSB), Royal Monetary Authority (RMA), Ministry of Finance (MOF), Ministry of Labour and Human Resources (MOLHR) and Ministry of Agriculture and Forest (MOAF). The interviews were conducted on March 28-30, 2011 and the national consultative meeting was held on 31 March 2011.

100. The assessment found that the BSS has the capacity to produce 24 of the 32 statistics within the core set of economic statistics, with 13 of these statistics meeting the recommended frequency. The assessment further found that although the BSS has the basic capacity to produce most of the statistics within the core set, it has limited capacity to produce many of these statistics at the recommended frequency and in accordance with relevant international standards and good practices.

101. Based on the interviews with statistics providers and users and the discussions during the consultative meeting the assessment found that improving/developing the capacity of the BSS to produce (at recommended frequency, in a timely manner and in accordance with recent international standards and methods): national accounts, structural statistics, PPI, BOP, IIP and short-term indicators on output, demand was a priority.

102. The assessment also found that the capacity of BSS to produce the core set of economic statistics was limited by constraints related to: financial and human resources, training, IT resources, data sources, business register, quality assurance, release calendars and metadata repositories. Additionally the assessment found that issues related to the use of financial and calendar year basis and lack of a single national data page affected the capacity of BSS to produce and disseminate statistics which are demanded by users. The assessment found that:

o The current financial and human resources place a constraint on the BSS. The limited financial resources and staff numbers significantly affect the capacity of the BSS to collect data for, compile and disseminate the core set of economic statistics of sufficient quality and in accordance with international practices and methods. These constraints limit the capacity of BSS to improve the existing economic statistics and implement current/modern methods and practices.

o The limited training opportunities at the national level, limit the ability of BSS to develop the statistical skills (particularly outside the NSB and RMA) of its new staff as well as improve the skills of existing staff. The lack of necessary statistical training and knowledge of recent international standards and methods affects the capacity of BSS to produce economic statistics and make the necessary improvements.

o The limited availability of source data is one of the main constraints affecting the capacity of the BSS to produce the core set of economic statistics of sufficient frequency and quality. The overall quality and timeliness of statistics is significantly affected by lack of, or poor frequency of necessary survey and administrative data.

o The BSS business register is in the early stages of development and at present is not of sufficient quality. This limits the capacity of the BSS to conduct coherent and comprehensive business surveys.

o The BSS computer systems are in need of modernization as they inhibit efficient production of economic statistics. The overall computer systems do not appear to be well connected with the collection of data for, compilation and dissemination of economic statistics, involving many manual steps and separate computer systems.

o The BSS does not at present use quality assessment frameworks to ensure the overall quality of statistics that are being produced. There are currently no systemized processes used for ensuring the overall quality of statistics.

o None of the organizations/departments responsible for dissemination of economic statistics within the core set publish the release calendars.

o Metadata and documentation has been identified by some of the other government organizations/departments as an area in need of improvement and assistance.

o At present no national summary data page exists which would allow users to access all statistics from a single website.

o While some statistics are compiled on a financial year basis (July - June) others are compiled on a calendar year basis (Jan - Dec). This difference in the definition of the year provides a significant challenge for users of statistics who wish to obtain a more comprehensive picture of the economy.

103. Bhutan is currently in the process of strengthening its national statistical system to ensure that it has the capacity to produce the necessary statistics including economic statistics. A number of ongoing and planned initiatives are aimed at improving the national statistical system and will address some of the constraints identified in the assessment.
104. Although the BSS has a clear plan for addressing some of the constraints identified above, it could substantially benefit from the activities planned under the Regional programme for the improvement of economic statistics in Asia and the Pacific, including among others capacity building activities, technical assistance and facilitating sharing of knowledge aimed at improving human resources, business registers, quality assessment frameworks, metadata repositories and others.
Annex III. Executive summary of Lao PDR assessment

105. The assessment of the capacity of Lao PDR to produce the core set of economic statistics was conducted to ensure relevance and guide identification of priorities for the ESCAP regional programme on economic statistics; to contribute to the work programme of ESCAP in economic statistics capacity development; and as a national capacity assessment tool for Lao DPR for furthering the national strategy on economic statistics. The assessment aimed to cover all aspects of Lao PDR Statistical System (LSS) involved in the production of the core set of economic statistics; including collection and processing; compilation, analysis and dissemination; statistical infrastructure (classifications, standards, frameworks, registers, IT infrastructure); human resources; and relationships between data providers, producers and users. The assessment identifies the main areas for capacity development needed for Lao PDR to produce the core set.

106. The development of this assessment consisted of 4 components: pre-mission analysis; in-country interviews; national consultative meeting; and research and reporting. As the LSS is a highly decentralized system, the interviews covered 10 different offices from 8 organisations, including the Lao PDR Department of Statistics (DoS) which is the head of the Lao PDR statistical system (LSS), the Bank of Lao PDR (BoL) and line ministry offices (as detailed in Section IV of the report). The interviews were conducted on April 5-7, 2011 and the national consultative meeting was on 8 April 2011.

107. Based on this assessment, Lao PDR is able to produce 15 of the 32 statistics in the core set of economic statistics at the required frequency. The availability, periodicity, timeliness, scope and quality of the core set need to be further developed for policy makers to be able to use core economic statistics to develop and monitor economic policy. Specifically, development and improvement of prices, national accounts and labour statistics are urgently needed for the LSS to support policy makers.

108. Limited human resources (with respect to staff numbers, training and expertise); lack of statistical infrastructure; limited available data sources; and poor coordination present the major obstacles in improving the periodicity, timeliness and quality of currently produced economic statistics. Further statistical advocacy and statistical coordination present additional hurdles in producing additional elements of the core set. (Note that the National Strategy for the Development of Statistics (NSDS) includes the improvement and further development of many elements of the core set and has mandated DoS as the head of the LSS, which makes statistical coordination more feasible).

109. In terms of capacity development, the LSS provides an excellent example of successful inter-regional staff exchanges, the development of a detailed strategic plan, and active engagement of government to obtain a commitment to statistics through law and support of the NSDS. However, Lao PDR faces a variety of obstacles in metadata compilation and dissemination; coordination; IT resources; weak data sources; training
and expertise; information sharing; quality assurance; statistical infrastructure; as well as other areas. Capacity development to enhance skills, build statistical infrastructure, improve transparency, and boost advocacy are vital for Lao PDR to have the capacity to compile high quality core economic statistics at the required frequency.

110. Staff skills and training are a vital component of producing high quality statistics. In Lao PDR, DoS and BoL staff receive international training, have access to inter-ASEAN staff exchange, build expertise through learning from visiting experts, and proficiency in English enables self-training; however, line ministry and local staff statistical training and expertise is limited. Line ministries and local staff are rarely invited to international statistical training and may have limited proficiency in English which further constricts access to international training, staff exchange and online learning. The statistical expertise of LSS staff would benefit from coordinated national training programmes in the Lao language. International training targeted at training of “trainers”, where the “trainers” then train other LSS staff may be especially beneficial. Increasing opportunities staff exchange within the LSS (between DoS and line ministries or DoS and regional offices) would also help develop the expertise of statistical staff outside of the DoS.

111. Coordination in is mandated by law, but in practice personal relationships are the mechanism of coordination. Coordination to reduce duplication of work and resolve discrepancies between agencies is necessary to ensure data quality and methodological transparency (this is highlighted by the unclear mandate for external merchandise trade which is currently being produced by DoS, BoL and MoIC with discrepancies existing between the three sources).

112. A sound statistical infrastructure results in increased efficiency and quality. A few ways the statistical infrastructure of Lao PDR could be boosted include through subscribing to the IMF Special Data Dissemination Standard (SDDS), developing data sources, improving the business register and developing IT infrastructure. Subscription to the SDDS would help Lao PDR in achieving methodological transparency and disseminated data. Currently, a national data dissemination platform that disseminates data across the LSS and supports dissemination of metadata is not available and is urgently needed. The lack of metadata across the LSS restricts the use of statistics and impacts the perception of data quality. The availability of source data is probably the greatest weakness of the LSS, too few census, surveys and administrative sources are available; securing financial and human resources, and improving IT infrastructure are necessary for the development of source data. As data sources are further developed, a comprehensive business register will be necessary to conduct efficient, high quality and high coverage surveys. Improving the IT infrastructure in Lao PDR would result in greater efficiency, higher quality (with data editing and quality assessments as an element of IT infrastructure), more interactive data dissemination, improved metadata compilation and more timely data.

113. To ensure the sustainability of the LSS in producing the core set of economic statistics, statistical advocacy must be maintained. LSS has shown tremendous strides in
getting the statistical law enacted and developing a NSDS. To continue to develop economic statistics in Lao PDR, coordinated advocacy which promotes the importance of the core set of economic statistics for policy making; addresses the value of using good practices for collection, compilation, analysis and dissemination of statistics; demonstrates the necessity of building data sources; and boosts the general understanding of economic statistics in the region are essential.

114. Coordinated capacity building that addresses the various needs of Lao PDR would have the maximum impact. LSS members and international organisations should carefully consider how capacity building initiatives will improve the long-term viability of the core set of economic statistics, as opposed to only accomplishing a short-term output.

115. The regional programme on economic statistics aims to have maximum impact in building capacity by targeting common obstacles. This work will help provide Lao PDR with additional opportunities for capacity building which is coordinated across international organizations to meet specific gaps in the compilation of the core set, which will boost the potential of Lao PDR in accomplishing their national strategy and in producing the core set of economic statistics.
Annex IV. Executive summary - Report on the ESCAP region-wide assessment of the capacity of national statistical systems in Asia and the Pacific to produce basic economic statistics

1. Background

1. At the inaugural session of the ESCAP Committee on Statistics, held in Bangkok from 4 to 6 February 2009, members recognized an urgent need for the improvement of economic statistics in Asia and the Pacific.

2. As one of the first steps aimed at assessing the current situation, ESCAP Statistics Division developed an assessment framework for conducting a region-wide assessment of the capacity of national statistical systems in Asia and the Pacific to produce basic economic statistics.

3. The ESCAP region-wide assessment was conducted during the period May to December 2009. The main objective of the assessment was to provide an overview of the current capacity of national statistical systems to produce basic economic statistics. The results of the assessment were/will be used for developing and monitoring the regional programme as well as an input to the global 2008 SNA implementation strategy.

4. The assessment framework was developed on the basis of existing frameworks and reviewed by an expert group. To reduce the burden on the National Statistical Systems (NSSs) and utilizing existing data gathered from other international organizations, national websites and other sources, relevant information was filled in by the ESCAP Statistics Division.

5. All 58 ESCAP members in the Asia-Pacific region were analysed.

2. Findings

6. In order to evaluate the capacity of ESCAP members to produce basic economic statistics, information was collected from international and national sources and validated by countries about the following aspects of economic statistics:

a. Statistical capacity overview
   i. Legal/institutional infrastructure
   ii. Source data - censuses and surveys
   iii. Source data - administrative data

13 The data presented in the present report concerns the 58 ESCAP regional members and associate members of the Commission. For the complete list of members and associate members, see www.unescap.org/about/member.asp.
iv. Source data - business registers
v. Classifications
b. National accounts
i. National accounts
ii. SNA
iii. Compliance with SNA93
iv. Compilation practices
v. Accounting conventions
vi. Dissemination
vii. 1993 SNA plans and intentions
viii. 2008 SNA and ISIC rev 4 plans and intentions
c. Other indicators
i. Employment/unemployment
ii. Wages/earnings
iii. Consumer price index (CPI)
iv. Producer price index (PPI)
v. Retail trade turnover
vi. Industrial production index (IPI)
vii. Volume/turnover in services
viii. Merchandise trade
ix. Balance of payments (BOP)
d. Seasonal adjustment
i. Seasonal adjustment
e. Results of SIAP Training Needs Survey
i. Results of SIAP Training Needs Survey

7. The assessment identified a number of issues where further improvement, development and assistance were needed in order for the ESCAP members to develop the capacity to produce basic economic statistics. These were:

Socio-economic, and geographical disaggregation

- ESCAP members in the Pacific and South/South West Asia lagged behind in many categories
- ESCAP members with lower incomes or lower population found it more difficult to produce a comprehensive set of economic statistics necessary for policymaking and analysis

Resources

- Of the ESCAP members for which data was available, 46 per cent described their financial resources as not adequate; almost all low-income and 50 per cent of the middle-income members indicated that they have insufficient financial resources
- All low-income and 15 per cent of the middle-income members for which data was available indicated that they have insufficient computing resources
• Of the members for which data was available, 71 per cent described their economic statistics staff numbers as not adequate, with 85 per cent of low-income, 81 per cent of middle-income and 29 per cent of high-income members indicating that they have inadequate economic statistics staff numbers

• Of the members for which data was available, 72 per cent described their national accounts staff numbers as not adequate with 86 per cent of low-income, 79 per cent of middle-income and 17 per cent of high-income members indicating that they have inadequate national accounts staff numbers

Staff training priorities

• Implementation of 2008 SNA and Integrated Economic Statistics have been identified as the two highest priority skills types for development by the ESCAP members.

• National accounts statistics, household income and expenditure statistics, informal sector statistics and labour force statistics have been identified by members as the top priority subject matter training related to economic statistics

Censuses, surveys and other data sources

• Almost all ESCAP members conducted population censuses and 57 per cent conducted agricultural censuses, however economic censuses were only conducted by 45 per cent of members

• While Households and Income Expenditure Surveys were conducted by 91 per cent of members, the Labour Force Surveys and Establishment/Enterprise surveys were less common, with Pacific being the main region where these surveys were seldom conducted

• Customs data was widely available (81 per cent) throughout the region, however fewer members had access to the other types of administrative data including central and commercial bank data (63 per cent), Ministry of Finance (59 per cent), tax data (55 per cent) and social security data (40 per cent)

Business registers

• Less than two-thirds of ESCAP members (60 per cent) had business registers and only 30 per cent of member in the South and South-West Asia had business registers

System of National Accounts
• Only a third of ESCAP members in the region produced all seven of the tables considered by the Inter-Secretariat Working Group on National Accounts (ISWNGA) to constitute a minimum requirement dataset (MRDS); while only a quarter had reached the third of the six ISWGNA milestones.

• Thirty-two per cent of members still compiled national accounts at least partly in accordance with the second (1968) version of the SNA, whereas the fourth (2008) version of the system was adopted by the United Nations Statistical Commission in 2009; only a quarter of the members had concrete plans to transit fully to the 2008 SNA.

• Slightly more than half of members produced national accounts at a frequency higher than annual.

Other selected economic statistics

• While most ESCAP members produced statistics on (un-)employment, wages and earnings, merchandise trade and balance of payment statistics as well as consumer price indices, a significantly smaller proportion compiled producer price and industrial production indices; less then half of the members produced statistics on retail trade turnover and only a quarter produced volume or turnover in services statistics.

• With the exception of merchandize trade, balance of payments and consumer price indices, less than half of the members produced these economic statistics at a frequency higher than annual.

• Use of international manuals and guidelines is still limited with just over half of the countries following the recommendations of the CPI Manual, and a significantly lower proportion following the other relevant international manuals such as PPI manual or International Merchandise Trade Statistics: Concepts and Definition.

Seasonal adjustment

• Only 29 per cent of ESCAP members produced any seasonally adjusted economic statistics.

3. ESCAP response to the needs identified in the assessment

8. The region-wide assessment identified a number of areas of economic statistics in the Asian and Pacific region that require development or further improvement. The finding of the assessment played a key role in the formulation of the Proposed Regional Programme for the Improvement of Economic
Statistics in Asia and the Pacific as contained in the secretariat paper E/ESCAP/CST(2)/5. The proposed regional programme was prepared by the secretariat, under the guidance of the Technical Advisory Group established by the Committee and in close consultation with other national and international partners. The Regional Programme will be considered by the Committee on Statistics at its second session.

9. The expected outcome of the Programme is that, by 2020, the national statistical systems of countries in Asia and the Pacific will have the capacity to produce a Core Set of Economic Statistics of appropriate quality required for short- and long-term economic analysis and decision making by both government and non-government agencies/organizations.

10. It is hoped that through improving the capacity of the ESCAP members to produce the Core Set of Economic Statistics, the Regional Programme will address most of the areas that have been highlighted by the region-wide assessment as in need of development and further improvement.
Annex V. Proposed core set of economic statistics

<table>
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<tr>
<th>Category of statistic</th>
<th>Frequency</th>
<th>In GDDS / SDDS?</th>
<th>Comments</th>
<th>Relevant international standard / guideline (including classification(s))</th>
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<tbody>
<tr>
<td>Prices and costs</td>
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<tr>
<td>Consumer price index (CPI)</td>
<td>Q</td>
<td>Y</td>
<td>The scope of the regimen should cover the goods and services that private households acquire. The index should, as far as possible, measure price movements that are representative for the whole country, ie the geographic coverage and reference population should be as wide as possible. However, practical (and utility) considerations may limit coverage to specified regions and population groups, eg private urban households. Component indexes covering major expenditure groups are recommended, and the wider uses of the CPI subindexes for deflation of national accounts flows should be considered in the CPI design. International Comparison Program (ICP) requirements should also be considered in CPI design.</td>
<td>ILO Resolution concerning CPI (17th International Conference of Labour Statisticians, 2003); Consumer Price Index Manual: Theory and Practice (ILO, 2004); Practical Guide to Producing Consumer Price Indices. A Supplementary handbook to the Consumer Price Index Manual (UNECE 2009) [Knowledge Base]</td>
</tr>
<tr>
<td>Producer price index (PPI)</td>
<td>Q</td>
<td>Y</td>
<td>The PPIs – and related commodity price indexes – can differ across countries in terms of industry and/or commodity coverage, and valuation point. What are required are indexes that track the prices of a wide range of market goods over</td>
<td>Producer Price Index Manual – 2004 [Knowledge Base]</td>
</tr>
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</table>
Such indexes will cover intermediate and final goods and services, including fixed assets, and will facilitate:

i) the monitoring of inflation at different stages of the product supply chain;

ii) price changes of key export and import commodities; and

iii) the deflation of national accounts variables, both industry outputs/inputs and final demand categories.

The range of industry/commodity indexes chosen will be country specific, but their scope should cover the above uses. Efforts should be made to ensure that at the very least key services are covered.

Consideration should also be given to producing residential and commercial property indexes given the key role such assets have in influencing investment and saving behaviour.

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<tr>
<th>Category of statistic</th>
<th>Frequency</th>
<th>In GDDS / SDDS?</th>
<th>Comments</th>
<th>Relevant international standard / guideline (including classification(s))</th>
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<tbody>
<tr>
<td>Commodity price index</td>
<td>M</td>
<td>N</td>
<td>Covered above. Only required for key commodities in the production process (inputs and outputs) and only if similar indexes are not already included in the PPI.</td>
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<tr>
<td>Category of statistic</td>
<td>Frequency</td>
<td>In GDDS/ SDDS?</td>
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<tr>
<td>External merchandise trade price indexes</td>
<td>M Y</td>
<td>The price indexes of goods and materials imported and exported complement the PPIs and their uses noted above. The total scope should match that of merchandise trade itself, although the range of commodity subindexes produced is country specific. The external merchandise trade price indexes are used to calculate the terms of trade index, which is derived as the export price index / import price index. A terms of trade index shows the relationship between the prices at which a country sells its exports and the prices it pays for its imports. If the prices of a country’s exports rise relative to the prices of its imports, its terms of trade are said to have moved in a favourable direction, because, in effect, it now receives more imports for each unit it exports. The terms of trade index is a useful summary statistic for those country’s vulnerable to changes that are occurring in it’s trading environment.</td>
<td>Export and Import Price Index Manual: Theory and Practice, 2009 (IMF)</td>
<td></td>
</tr>
<tr>
<td>Wages / Earnings data</td>
<td>Q Y</td>
<td>Nominal wages and/or earnings data for a specified time period, allowing average hourly or weekly series to be derived. Industry, occupation or gender breakdowns to be determined by country.</td>
<td>ILO Resolution concerning an integrated system of wages statistics (12th ICLS, 1973)</td>
<td></td>
</tr>
<tr>
<td>Labour costs index / Wage index</td>
<td>Q Y</td>
<td>The cost pressure arising from paid employment is measured by a labour cost or wage index. While the labour cost index will have a wider scope, covering all items in compensation of employees, an index confined to wages may suffice. As with the wages data itself, industry breakdowns can be</td>
<td>Resolution concerning the measurement of employment-related income (17th ICLS, 1998)</td>
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<td>ILO Resolution concerning</td>
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<th>Category of statistic</th>
<th>Frequency</th>
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<th>Comments</th>
<th>Relevant international standard / guideline (including classification(s))</th>
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<tr>
<td>Exchange rates</td>
<td>D</td>
<td>Y</td>
<td>The daily exchange rates data should cover both spot and forward exchange rates for major currencies with respect to the national currency. For monitoring purposes, exchange rates based on monthly averages and end-month rates should be calculated. In addition, nominal and real effective exchange rates should be calculated monthly. A nominal effective exchange rate is the exchange rate of the domestic currency vis-à-vis other currencies weighted by their share in the country’s international trade. Real effective exchange rates take account of price level differences between trading partners. Movements in real effective exchange rates provide an indication of the evolution of a country’s aggregate external price competitiveness.</td>
<td>statistics of labour cost (11th ICLS, 1966)</td>
</tr>
<tr>
<td>Purchasing power parities (PPPs)</td>
<td>Ad hoc</td>
<td>N</td>
<td>While PPPs are not produced directly by NSOs, it is strongly recommended that countries join the ICP programme. The tasks of providing price and expenditure data for the ICP programme may be reduced if these requirements are considered at the same time that related domestic statistical outputs are designed. PPPs statistics are also needed for deriving Millennium Development Goal indicators.</td>
<td>International Comparison Program - Methodological Handbook 2005 [Knowledge Base]</td>
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<td>Category of statistic</td>
<td>Frequency</td>
<td>In GDDS / SDDS?</td>
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<tr>
<td>Demand and output</td>
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<tr>
<td>Gross Domestic Product (GDP) (production) (P) nominal and real</td>
<td>Q</td>
<td>Y</td>
<td>The national accounts provide the comprehensive statistical framework to study the relationships between key macroeconomic variables.</td>
<td>System of National Accounts 1993 [Knowledge Base]</td>
</tr>
<tr>
<td>GDP (expenditure) (E) nominal and real (including implicit price indexes for GDP(E)</td>
<td>Q</td>
<td>Y</td>
<td>Included here is quarterly GDP in nominal and volume terms, disaggregated by :</td>
<td>System of National Accounts 2008</td>
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<td>and components)</td>
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<td></td>
<td>i) Major expenditure components; and</td>
<td>Quarterly National Accounts Manual: Concepts, data Sources and Compilation, 2001 (IMF)</td>
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<td></td>
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<td></td>
<td>ii) By industry. The level of industry detail is not prescribed and is country specific.</td>
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<td>In place of a nominal GDP(P) by industry series, or in addition to it, countries are encouraged to produce quarterly value-added by income component, along with quarterly GNI and Saving series.</td>
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<td></td>
<td>The production of GDP(E) and its components in nominal and volume terms allows the calculation of the associated implicit price deflators.</td>
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<td></td>
<td></td>
<td></td>
<td>ICP requirements should be taken into account when determining the expenditure components of GDP to be produced.</td>
<td></td>
</tr>
<tr>
<td>External trade – merchandise</td>
<td>M</td>
<td>Y</td>
<td>Exports and imports of goods, in nominal values (national currency) and in volume terms (ie volume indexes). Commodity detail is country specific. The values, volume</td>
<td>International Merchandise Trade Statistics: Concepts and Definitions, Revision 2</td>
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<td>Category of statistic</td>
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<td>indexes and price indexes (refer above)/unit value indices for merchandise trade are to have consistent coverage and presentation, facilitating a comprehensive analysis of external trade. The merchandise trade data also provide a more timely indicator of developments in the current account of the balance of payments.</td>
<td></td>
<td>(1998) [Knowledge Base]</td>
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</tr>
<tr>
<td>External trade - services</td>
<td>Q N</td>
<td></td>
<td>Exports and imports of services analysed by product, in nominal values (national currency). While these aggregate series are required to compile the quarterly Balance of Payments, if trade-in-services are important for the quarterly monitoring of an economy, it is recommended that detailed series be compiled. Product detail is country specific. [Also refer to the Short term indicator section below.]</td>
<td>Manual on Statistics of international trade in services (2002) [Knowledge Base]</td>
</tr>
<tr>
<td>Short term indicator (STI) - industry output</td>
<td>Q Y</td>
<td></td>
<td>STI can cover a wide range of statistics, in terms of both their coverage (industry, product) and their statistical form (current or constant dollars, volume indexes). The purpose of the STI is to provide an important insight into a specific aspect of the real or financial economy. They complement GDP by being more timely and, although less comprehensive in coverage, STI serve as leading indicators of GDP. Accordingly, STI need to be produced ahead of quarterly GDP itself, preferably monthly. However, for the core set, a quarterly frequency is specified.</td>
<td>International Recommendations for the Index of Industrial Production, 2010 (UNSD) Manual for an Index of Services Production, 2007 (OECD)</td>
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</table>
The STI included here are mainly backward-looking, i.e., they record events that have already happened. This does not rule out the production of forward-looking STI such as new orders or investment intentions, although these would be additional to the core set recommendations.

The choice of indicator depends on a country’s economic structure. Recommended in the core set are STI that cover:

- **Industry production**, which may take an industry or product dimension. The key industries/products to be covered are country specific and may need to distinguish between industries/products that respond differently to changes in internal or external demand. Monitoring key export industries and/or products may be critical. The term “industry” is used broadly and embraces primary and secondary goods producing industries and services industries. Efforts should be made to ensure that at the very least key services are covered.

- **Consumer demand**. Retail sales volumes indicators are traditionally produced, but with services making up a significant and growing proportion of household spending, additional STI for expenditure on services may be required. For countries with important tourism industries, STI covering inbound tourist numbers, accommodation occupancy rates etc. may be needed.

- **Investment**, both in fixed assets and inventories. The

<table>
<thead>
<tr>
<th>Category of statistic</th>
<th>Frequency</th>
<th>In GDDS / SDDS?</th>
<th>Comments</th>
<th>Relevant international standard / guideline (including classification(s))</th>
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<td>The STI included here are mainly backward-looking, i.e., they record events that have already happened. This does not rule out the production of forward-looking STI such as new orders or investment intentions, although these would be additional to the core set recommendations. The choice of indicator depends on a country’s economic structure. Recommended in the core set are STI that cover: <strong>Industry production</strong>, which may take an industry or product dimension. The key industries/products to be covered are country specific and may need to distinguish between industries/products that respond differently to changes in internal or external demand. Monitoring key export industries and/or products may be critical. The term “industry” is used broadly and embraces primary and secondary goods producing industries and services industries. Efforts should be made to ensure that at the very least key services are covered. <strong>Consumer demand</strong>. Retail sales volumes indicators are traditionally produced, but with services making up a significant and growing proportion of household spending, additional STI for expenditure on services may be required. For countries with important tourism industries, STI covering inbound tourist numbers, accommodation occupancy rates etc. may be needed. <strong>Investment</strong>, both in fixed assets and inventories. The</td>
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<td>Short Term Economic Statistics Timeliness framework (OECD)</td>
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<tr>
<td>Economy structure statistics</td>
<td>5-yearly or at regular intervals</td>
<td>N</td>
<td>Periodic industry censuses / surveys provide the detailed structural data needed for a wide range of economic statistical outputs, including: &lt;ul&gt;&lt;li&gt;Industry value-added by component series needed to benchmark GDP.&lt;/li&gt;&lt;li&gt;Supply-Use Tables and Industry / product weights for producer price indexes (assuming product breakdowns of gross output and intermediate consumption are also collected).&lt;/li&gt;&lt;li&gt;Detailed financial data needed to analyse and monitor the economic performance of key or complex industries.&lt;/li&gt;&lt;/ul&gt; Included in this category are censuses / surveys that collect either financial data (sales, costs, profits, investment, assets and liabilities) or non-financial data (such as surveys of agriculture production, forestry and fishing activity, mining etc.). The conduct of the census/survey requires an up-to-date Business Frame of business enterprises, appropriately</td>
<td>International Recommendations for Industrial Statistics (IRIS) 2008</td>
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<td>The coverage, frequency and type of census/survey is not specified in the core set and will be country specific. Obtaining the economic data required for the above indicative uses can be obtained in a number of different ways using a range of collection vehicles, eg full census or sample survey; economy wide coverage or key industries only; annual, periodic or irregular frequency; collection of data via a questionnaire, use of administrative data or a combination of both; etc.</td>
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<tr>
<td>Productivity</td>
<td>A</td>
<td>N</td>
<td>Included are labour productivity measures only. While Multifactor Productivity (MFP) measures are desired, they are not included in the core set recommendations. For an economy-wide labour productivity measure, GDP per hour worked is recommended, although, if hours worked data is not available, then GDP per full-time equivalent employed person or job is an alternative. While economy-wide measures are recommended, it is accepted that non-market measurement issues may need to restrict the scope to market industries and/or the business sector. Needed for deriving Millennium Development Goal indicators.</td>
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<tr>
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<td>Measuring Capital – OECD Manual</td>
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<td>Institutional sector accounts</td>
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<td>Broad money and credit</td>
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<td>General government operations</td>
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