

ANGGARAN PENGELUARAN



SEKTOR PERTANIAN

METODOLOGI

Data banci dan *Supply & Use Tables* bagi tahun 2015 telah digunakan untuk penganggaran output dan penggunaan perantaraan pada harga semasa. Bagi tahun yang tiada data banci, kuantiti pengeluaran dan maklumat harga berkaitan telah digunakan. **Output** juga termasuk anggaran pembentukan modal tetap daripada:

- tanaman baru yang belum mengeluarkan hasil (bagi Getah, Kelapa Sawit dan Pertanian Lain);
- baka ternakan (bagi Ternakan); dan
- balak yang ditanam tetapi belum mencapai tempoh matang untuk ditebang (bagi Perhutanan dan Pembalakan).

Anggaran **penggunaan perantaraan** pada harga malar menggunakan nisbah input-output yang dikemaskini berdasarkan data terkini.

Nilai ditambah pada harga semasa diperoleh dengan menaikkan kedua-dua output dan penggunaan perantaraan. Bagi tahun-tahun di mana tiada data, anggaran pengeluaran adalah berdasarkan perangkaan pengeluaran bulanan.

SUMBER DATA

GETAH

- Perangkaan Getah Bulanan, Malaysia
- Perangkaan Getah Tahunan, Malaysia
- Lembaga Getah Malaysia
- Perangkaan Perdagangan Luar Negeri Bulanan

KELAPA SAWIT

- Lembaga Minyak Sawit Malaysia
- Laporan Tahunan Syarikat-Syarikat Penanaman Kelapa Sawit yang Utama
- Perangkaan Perdagangan Luar Negeri Bulanan

TERNAKAN

- Jabatan Perkhidmatan Veterinar, Semenanjung Malaysia
- Jabatan Perkhidmatan Veterinar, Sabah
- Jabatan Perkhidmatan Veterinar, Sarawak
- Perangkaan Perdagangan Luar Negeri Bulanan
- Kementerian Pertanian dan Keterjaminan Makanan, Malaysia

PERTANIAN LAIN

- Kementerian Perusahaan Perladangan dan Komoditi
- Kementerian Pertanian dan Keterjaminan Makanan, Malaysia
- Lembaga Perindustrian Nanas, Malaysia
- Lembaga Kenaf dan Tembakau Negara, Malaysia
- Lembaga Lada Malaysia
- Lembaga Pemasaran Pertanian Persekutuan

PERHUTANAN DAN PEMBALAKAN

- Jabatan Perhutanan, Semenanjung Malaysia
- Jabatan Perhutanan, Sabah
- Jabatan Perhutanan, Sarawak
- Perangkaan Perdagangan Luar Negeri
- Dasar Perindustrian Kayu Negara (NATIP)

PERIKANAN

- Jabatan Perikanan, Malaysia
- Perangkaan Perdagangan Luar Negeri Bulanan



SEKTOR PERLOMBONGAN DAN PENGKUARIAN

METODOLOGI

Anggaran **output** dan **penggunaan perantaraan** pada harga semasa adalah berdasarkan data banci/ survei tahunan. Bagi tahun yang tiada data banci/ survei tahunan, kuantiti pengeluaran dan maklumat harga bagi minyak mentah, kondensat, gas asli dan perlombongan lain telah digunakan. Bagi perlombongan & pengkuarian dan aktiviti sokongan, banci/ survei tahunan yang terkini digunakan untuk mendapatkan nisbah input-output.

Nilai ditambah pada harga malar diperoleh dengan mendeinflasi kedua-dua output dan penggunaan perantaraan. Bagi tahun yang tiada data banci/ survei tahunan, anggaran bagi pengeluaran perlombongan & pengkuarian lain menggunakan perangkaan pengeluaran daripada Jabatan Mineral dan Geosains.

SUMBER DATA

PETROLEUM DAN GAS ASLI

- Banci Ekonomi Petroleum dan Gas Asli
- SUT 2015
- Petroliaam Nasional Berhad (PETRONAS)
- Statistik Ekonomi Tahunan Perlombongan Petroleum dan Gas Asli

PERLOMBONGAN LAIN & PENGKUARIAN DAN PERKHIDMATAN SOKONGAN

- Banci Ekonomi Perlombongan dan Pengkuarian
- SUT 2015
- Statistik Ekonomi Tahunan Perlombongan Petroleum dan Gas Asli
- Survei Akaun Negara Suku Tahunan
- Jabatan Mineral dan Geosains



SEKTOR PEMBUATAN

METODOLOGI

Output diselaraskan semula dengan *Supply & Use Tables* bagi tahun 2015. Data banci/ survei tahunan telah digunakan dalam anggaran. Data akaun kerajaan memberikan maklumat cukai yang dikenakan ke atas komoditi industri Pembuatan. Ini membolehkan output dinilai pada harga pengeluar.

Bagi aktiviti pemasangan kenderaan bermotor, elektronik, logam yang direka dan pemprosesan minyak sawit, pelarasan kepada output dibuat bagi pemasangan/ pemprosesan yang dibuat secara kontrak/ bayaran oleh pihak lain.

Anggaran **penggunaan perantaraan** pada harga malar menggunakan nisbah input-output daripada banci/ survei tahunan. **Nilai ditambah** pada harga malar diperoleh dengan mendeflasi kedua-dua output dan input. Bagi tahun-tahun di mana tiada data banci/ survei tahunan, anggaran pengeluaran adalah berdasarkan nilai daripada Survei Pembuatan Bulanan dan Indeks Pengeluaran Perindustrian dengan andaian perubahan input bergerak pada kadar yang sama dengan perubahan output pada harga malar.

SUMBER DATA

- Banci Ekonomi Pembuatan
- SUT 2015
- Survei Ekonomi Tahunan
- Indeks Pengeluaran Perindustrian
- Survei Pembuatan Bulanan
- Perangkaan Perdagangan Luar Negeri Bulanan
- Jabatan Akauntan Negara Malaysia (JANM)



SEKTOR PEMBINAAN

METODOLOGI

Nilai output diselaraskan semula dengan *Supply & Use Tables* bagi tahun 2015. Banci/ survei tahunan digunakan dalam penganggaran **output** bagi sektor ini. Bagi tahun yang tiada data, Statistik Pembinaan Suku Tahunan digunakan dalam penganggaran output pada harga semasa. Di samping itu, maklumat sekunder bagi pembinaan yang berkaitan dengan aktiviti ke hadapan (*upstream activity*) industri minyak dan gas turut diambil kira. Anggaran **penggunaan perantaraan** pada harga malar menggunakan nisbah input-output daripada banci/ penyiasatan tahunan.

Nilai ditambah pada harga malar diperoleh dengan mendeflasi kedua-dua output dan penggunaan perantaraan. Bagi tahun yang tiada data banci/ survei tahunan, anggaran adalah berdasarkan Statistik Pembinaan Suku Tahunan dengan andaian perubahan input bergerak pada kadar yang sama dengan perubahan output pada harga malar.

SUMBER DATA

- Banci Ekonomi Pembinaan
- SUT 2015
- Survei Ekonomi Tahunan Pembinaan
- Statistik Pembinaan Suku Tahunan



SEKTOR PERKHIDMATAN

METODOLOGI

A) PERKHIDMATAN SWASTA

Output bagi sektor Perkhidmatan Swasta dianggarkan pada harga semasa berdasarkan banci/ survei tahunan, penyata kewangan dan data pentadbiran dari pelbagai agensi yang merangkumi subsektor seperti berikut:

UTILITI

Bagi tahun yang tiada data banci/ survey tahunan, data penggunaan digunakan sebagai penggerak bagi menganggar output tahunan.

PERDAGANGAN BORONG & RUNCIT

Banci Perdagangan Edaran 2014, Banci Perdagangan Borong & Runcit 2019 dan anggaran Survei Ekonomi Tahunan digunakan sebagai rujukan. Bagi tahun yang tiada data banci/ survei tahunan, data Survei Perdagangan Edaran Bulanan dan Indeks Perdagangan Edaran digunakan sebagai penggerak bagi menganggar output tahunan.

MAKANAN & MINUMAN, PENGINAPAN, PENGANGKUTAN & PENYIMPANAN, MAKLUMAT DAN KOMUNIKASI, HARTANAH, PERKHIDMATAN PERNIAGAAN, PERKHIDMATAN PENDIDIKAN SWASTA, PERKHIDMATAN KESIHATAN SWASTA DAN PERKHIDMATAN SWASTA LAIN

Bagi tahun yang tiada data banci/ survey tahunan, data Survei Perkhidmatan Suku Tahunan dan Indeks Perkhidmatan digunakan sebagai penggerak bagi menganggar output tahunan.

KEWANGAN

Output utama terdiri daripada caj perkhidmatan ketara dan FISIM. FISIM dikira mengikut konsep kadar faedah rujukan seperti yang disarankan dalam *SNA 2008*. Agihan FISIM dibuat mengikut komposisi stok pinjaman dan deposit dalam sistem perbankan.

INSURANS

Output pada harga semasa diperoleh daripada hasil tambah pendapatan premium dan pendapatan pelaburan bersih tolak tuntutan dibayar.

KEDIAMAN YANG DIDIAMI OLEH PEMILIK

Bilangan kediaman yang didiami pemilik daripada Banci Penduduk dan Perumahan dan maklumat purata sewa mengikut jenis kediaman daripada Penyiasatan Perbelanjaan Isi Rumah digunakan sebagai rujukan untuk menganggar output pada harga malar. Bagi tahun-tahun berikutnya, output pada harga malar diekstrapolasi berdasarkan perubahan stok perumahan yang mengambil kira pertambahan faktor perkadaran penduduk yang memiliki rumah sendiri di Malaysia.

INSTITUSI BUKAN KEUNTUNGAN YANG BERKHIDMAT KEPADA ISI RUMAH (NPISHs)

Bagi tahun di mana tiada data banci/ survei tahunan, data jumlah penduduk digunakan sebagai penggerak bagi menganggar output tahunan pada harga malar.

PERKHIDMATAN DOMESTIK BAGI ISI RUMAH

Data jumlah penduduk digunakan sebagai penggerak bagi menganggar output tahunan pada harga malar.

Indeks harga yang berkaitan digunakan untuk mendeflasi output bagi mendapatkan output pada harga malar. Anggaran **penggunaan perantara** pada harga malar adalah menggunakan nisbah input-output yang dikemaskini berdasarkan data terkini. FISIM turut diambil kira sebagai penggunaan perantara.

Nilai ditambah pada harga malar diperoleh sebagai baki hasil tolak penggunaan perantara daripada output.

B) PERKHIDMATAN KERAJAAN

Industri ini dikategorikan sebagai pengeluar bukan pasaran, oleh yang demikian nilai ditambah diperoleh daripada pampasan pekerja, pencen yang diperuntukkan kepada pekerja yang sedang bekerja dan *Consumption of Fixed Capital (COFC)*. Ia disusun berdasarkan aktiviti Kerajaan Persekutuan, Kerajaan Negeri, Badan Berkanun dan Pihak Berkuasa Tempatan. Anggaran nilai ditambah pada harga malar dijelaskan pada Perbelanjaan Penggunaan Akhir Kerajaan.

SUMBER DATA

Subsektor	Utiliti	Perdagangan borong & runcit	Makanan & minuman	Penginapan	Pengangkutan & penyimpanan	Maklumat & komunikasi	Kewangan	Insurans	Hartanah	Perkhidmatan perniagaan	Pendidikan swasta	Kesihatan swasta	Perkhidmatan lain	Kediaman yang didiami oleh pemilik	Institusi bukan keuntungan yang berkhidmat kepada isi rumah	Perkhidmatan domestik bagi isi rumah	Perkhidmatan kerajaan
Sumber Data																	
1 Banci Ekonomi	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2 Supply & Use Tables 2015	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3 Banci Perdagangan Edaran		✓															
4 Statistik Ekonomi Tahunan	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
5 Survei Perdagangan Edaran Bulanan		✓															
6 Survei Perkhidmatan Suku Tahunan			✓	✓	✓	✓			✓	✓	✓	✓	✓				
7 Banci Penduduk dan Perumahan														✓	✓	✓	
8 Survei Pendapatan, Perbelanjaan Isi Rumah dan Kemudahan Asas														✓			
9 Survei Tenaga Buruh																✓	
10 Bank Negara Malaysia							✓	✓									
11 Jabatan Akauntan Negara Malaysia (JANM)																	✓
12 Penyata Kewangan Kerajaan Negeri, Pihak Berkuasa Tempatan dan Badan-badan Berkanun																	✓
13 Jabatan Perkhidmatan Awam																	✓
14 Kumpulan Wang Persaraan (Diperbadankan)																	✓
15 Pusat Maklumat Harta Tanah Negara (NAPIC)									✓					✓			
16 Penyata Kewangan Syarikat	✓						✓	✓									



DUTI IMPORT

METODOLOGI

Ukuran muktamad diperoleh daripada laporan tahunan Jabatan Akauntan Negara dan ia akan digunakan untuk anggaran tahunan. Akaun bulanan yang diperoleh daripada Jabatan Kastam Diraja Malaysia telah digunakan dalam penganggaran bagi tahun yang terkini.

Duti import pada harga semasa dideflasi dengan menggunakan harga berkaitan untuk mendapatkan duti import pada harga malar.

SUMBER DATA

- Jabatan Akauntan Negara Malaysia (JANM)
- Jabatan Kastam Diraja Malaysia

ANGGARAN PERBELANJAAN



PERBELANJAAN PENGGUNAAN AKHIR SWASTA

METODOLOGI

Perbelanjaan Penggunaan Akhir Swasta terdiri daripada Perbelanjaan Penggunaan Akhir Isi Rumah dan Perbelanjaan Penggunaan Akhir Institusi Bukan Keuntungan yang Berkhidmat kepada Isi Rumah (NPISHs).

Perbelanjaan Penggunaan Akhir Isi Rumah dianalisa mengikut komoditi dan kumpulan perkhidmatan berdasarkan *Classification of Individual Consumption by Purpose (COICOP)* yang dibahagikan kepada empat kategori: barang tahan lama, barang tidak tahan lama, barang separa tahan lama dan perkhidmatan.

Untuk mengira perbelanjaan penggunaan perkhidmatan yang berkaitan, sebahagian nilai output pada harga semasa dan malar bagi perkhidmatan tersebut telah diambil kira sebagai penggerak bagi mendapatkan nilai penggunaan pada harga semasa.

FISIM turut dimasukkan dalam anggaran Perbelanjaan Penggunaan Akhir Isi Rumah.

Survei Pendapatan, Perbelanjaan Isi Rumah dan Kemudahan Asas digunakan sebagai tanda aras untuk mendapatkan anggaran perbelanjaan tahunan pada harga semasa dan pengagihan perbelanjaan mengikut jenis barangan dan perkhidmatan.

Nilai perbelanjaan pada harga malar diperoleh dengan mendeflasi anggaran pada harga semasa setiap item dengan IHP.

Perbelanjaan penggunaan akhir NPISHs diperoleh dengan menjumlahkan penggunaan perantaraan dan pampasan pekerja dan ditolak pendapatan daripada hasil jualan.

Penggunaan Akhir Sebenar Isi Rumah

- = Perbelanjaan penggunaan akhir swasta
- + Perbelanjaan penggunaan akhir NPISHs
- + Penggunaan perseorangan kerajaan am
(perkhidmatan kesihatan, pendidikan, keselamatan sosial dan kebajikan)

SUMBER DATA

- Survei Pendapatan, Perbelanjaan Isi Rumah dan Kemudahan Asas
- SUT 2015
- Banci Ekonomi
- Survei Ekonomi Tahunan
- Imbangan Pembayaran Suku Tahunan
- Survei Bulanan Perdagangan Borong & Runcit
- Survei Perkhidmatan Suku Tahunan
- Perangkaan Perdagangan Luar Negeri Bulanan
- Bank Negara Malaysia
- Lembaga Penggalakan Pelancongan Malaysia



PERBELANJAAN PENGGUNAAN AKHIR KERAJAAN

METODOLOGI

Perbelanjaan Penggunaan Akhir Kerajaan bersamaan dengan output kerajaan tolak nilai jualan dan ditambah dengan FISIM. Output bersamaan dengan nilai ditambah campur penggunaan perantaraan.

Anggaran nilai ditambah pada harga malar diperoleh dengan mendeflasi gaji dan upah dengan indeks kadar gaji permulaan Kerajaan Persekutuan. Dalam membangunkan indeks gaji, semakan bayaran gaji dan bonus telah dikira sebagai kenaikan harga, manakala kenaikan gaji tahunan penjawat awam dikira sebagai kenaikan dalam produktiviti. Sementara itu, penggunaan perantaraan pada harga malar diperoleh dengan mendeflasi menggunakan indeks IHPR dan IHP. *Consumption of Fixed Capital (COFC)* pada harga malar diperoleh menggunakan *Perpetual Inventory Method (PIM)* bersepadu dan harga semasa dianggar dengan menaikkan COFC bagi aset terpilih dengan menggunakan indeks harga yang sesuai. Kaedah ini adalah selari dengan saranan oleh *SNA 2008*.

Perbelanjaan Penggunaan Akhir Kerajaan dikategorikan kepada penggunaan individu oleh kerajaan am (juga dikenali sebagai pindahan sosial) dan penggunaan terkumpul kerajaan am.

Penggunaan terkumpul oleh kerajaan am adalah sebahagian daripada perbelanjaan penggunaan kerajaan yang diperoleh daripada kerajaan am seperti pekhidmatan awam am, pertahanan, keselamatan dan ketenteraman awam dan hal ehwal ekonomi. Semua perbelanjaan ini disediakan oleh kerajaan am secara serentak kepada semua ahli dalam komuniti atau kepada semua ahli dalam sektor tertentu bagi komuniti. Tiada mekanisme pengagihan semula sumber-sumber tersebut di kalangan individu isi rumah.

Penggunaan individu kerajaan am adalah perbelanjaan yang turut dikeluarkan oleh kerajaan am tetapi sebenarnya ia diperoleh isi rumah seperti pendidikan, kesihatan dan perlindungan sosial.

SUMBER DATA

- Jabatan Akauntan Negara Malaysia (JANM)
- Penyata Kewangan Kerajaan Negeri, Pihak Berkuasa Tempatan dan Badan-badan Berkanun



PEMBENTUKAN MODAL TETAP KASAR

METODOLOGI

Anggaran Pembentukan Modal Tetap Kasar (PMTK) mengikut jenis aset dibahagikan kepada tiga jenis aset iaitu Struktur, Jentera & Kelengkapan dan Aset Lain. PMTK jenis aset Struktur dikira berdasarkan kepada nilai output dari aktiviti pembinaan serta maklumat pelaburan minyak dan gas. Kos pemindahan hak milik ke atas struktur dianggarkan dan ditambah untuk mendapatkan nilai pada harga pembeli.

PMTK jenis aset Jentera & Kelengkapan dianggarkan menggunakan nisbah SUT 2015 ke atas komoditi output yang diperoleh dari Penyiasatan Pembinaan Tahunan, Statistik Pembinaan Suku Tahunan, Penyiasatan Industri Pembuatan Tahunan, Perangkaan Pembuatan Bulanan dan import barangan modal. Bagi Aset Lain, anggaran adalah berdasarkan daripada Statistik Ekonomi Tahunan Perlombongan Petroleum dan Gas Asli, perbelanjaan cari gali minyak & gas dan pelbagai sumber data daripada agensi kerajaan yang berkaitan.

PMTK mengikut sektor diklasifikasi kepada sektor Awam dan Swasta. Nilai PMTK Awam diperoleh daripada maklumat Perbelanjaan Aset bagi Akaun Kewangan Kerajaan Am Tahunan dan penyiasatan Perbelanjaan Modal untuk Pertubuhan Awam. Manakala PMTK Swasta dianggarkan menggunakan maklumat banci/ penyiasatan ke atas pertubuhan swasta dan pelbagai sumber data pentadbiran yang berkaitan.

Nilai PMTK pada harga malar diperoleh dengan mendeflasi nilai PMTK pada harga semasa dengan indeks harga berkaitan.

SUMBER DATA

- SUT 2015
- Banci Ekonomi
- Statistik Ekonomi Tahunan Perlombongan Petroleum dan Gas Asli
- Survei Ekonomi Tahunan
- Lembaga Minyak Sawit Malaysia
- Kementerian Pertanian & Keterjaminan Makanan dan agensi yang berkaitan
- Statistik Pembinaan Suku Tahunan
- Penyiasatan Pembuatan Bulanan
- Perangkaan Perdagangan Luar Negeri Bulanan
- Imbangan Pembayaran Suku Tahunan
- Perbadanan Kemajuan Filem Nasional Malaysia (FINAS)
- Persatuan Industri Rakaman Malaysia (RIM)
- Kajian Penyelidikan dan Pembangunan Nasional, MASTIC
- Pusat Maklumat Harta Tanah (NAPIC)
- Penyata Kewangan Kerajaan Persekutuan, Kerajaan Negeri, Pihak Berkuasa Tempatan dan Badan-badan Berkanun
- Penyiasatan Perbelanjaan Modal Pertubuhan Awam
- Penyata Kewangan Syarikat



PERUBAHAN INVENTORI

METODOLOGI

Perubahan inventori merujuk kepada perbezaan di antara tambahan kepada dan pengeluaran daripada inventori. Secara prinsipnya, ia boleh diperoleh daripada hasil tolak inventori akhir dan inventori awal.

Secara amnya, inventori boleh menjana keuntungan atau kerugian kerana harga barangan yang disimpan boleh jatuh atau naik mengikut harga pasaran. Janaan keuntungan dan kerugian ini bukanlah hasil operasi pengeluaran, oleh itu sumbangannya tidak dikira di dalam penyusunan KDNK.

Inventori awal pada harga semasa perlu dideflasi dengan menggunakan harga pada masa inventori masuk bagi mendapatkan inventori awal pada harga malar. Kemudian, inventori awal pada harga malar dinaikkan menggunakan harga pada masa inventori akhir bagi mendapatkan nilai pada harga semasa. Seterusnya, perbezaan antara inventori akhir dan inventori awal akan memberi perubahan dalam inventori tanpa holding gains atau kesan kerugian.

SUMBER DATA

- Survei Pembuatan Bulanan
- Perangkaan Getah Tahunan, Malaysia
- Survei Perdagangan Edaran Bulanan
- Lembaga Minyak Sawit Malaysia
- Jabatan Perkhidmatan Veterinar
- Akaun Kerajaan Persekutuan



BARANGAN BERHARGA

METODOLOGI

Barangan berharga bermaksud barangan yang dibeli dengan tujuan untuk pelaburan di mana pembelian tersebut dibuat dengan anggapan bahawa nilai barang tersebut akan meningkat pada masa akan datang. Antara contoh barangan berharga adalah logam dan batu berharga, barang antik, barang seni dan sebagainya. Nilai pada harga semasa diperoleh dari pelbagai indikator dan sumber data termasuklah data import, penyiasatan pembuatan dan perdagangan edaran. Data ini kemudiannya dideflasi dengan indeks harga yang berkaitan untuk mendapatkan nilai pada harga malar.

SUMBER DATA

- Survei Perdagangan Edaran Bulanan
- Survei Pembuatan Bulanan



EKSPORT DAN IMPORT

METODOLOGI

Data Eksport dan Import data adalah termasuk dagangan dan perkhidmatan. Walau bagaimanapun, nilai eksport dan import ini tidak termasuk peminjaman dan pemberian pinjaman, faedah dan bayaran pindahan lain antara rakyat Malaysia dengan rakyat negara lain.

Nilai dagangan disusun dari Borang Ikrar Kastam yang diproses oleh Jabatan ini manakala maklumat berkaitan nilai perkhidmatan diperoleh daripada pelbagai sumber termasuk syarikat penerbangan negara, Bank Negara Malaysia, Jabatan Imigresen dan pelbagai penyiasatan seperti Penyiasatan Suku Tahunan Pelaburan Antarabangsa, Penyiasatan Syarikat Penerbangan Asing di Malaysia dan Banci Syarikat Perkapalan di Malaysia.

Rekod perdagangan barangan yang mana transaksi tidak diliputi (contoh; eksport air) atau dagangan yang tidak mengurus niaga antara Malaysia dengan negara lain (contoh; barang transit melalui Malaysia dan barang yang dibawa masuk untuk dibaiki dan dieksport semula) perlu diselaraskan. Maklumat tentang penerimaan dan pembayaran bagi perjalanan diperoleh daripada pelbagai sumber termasuk penyiasatan yang dibuat oleh Lembaga Penggalak Pelancongan Malaysia.

Nilai eksport dan import direkodkan mengikut prinsip pertukaran pemilikan iaitu aliran barangan di antara negara pemilik barangan dan negara yang menyediakan khidmat pemprosesan tidak perlu direkodkan sebagai import dan eksport barangan.

SUMBER DATA

- Perangkaan Perdagangan Luar Negeri Bulanan
- Imbangan Pembayaran Suku Tahunan
- Bank Negara Malaysia
- Lembaga Penggalakan Pelancongan Malaysia
- Jabatan Imigresen Malaysia



PELARASAN

Anggaran pengeluaran dan perbelanjaan perlu sama secara teori. Walau bagaimanapun, dari segi amalan, ini tidak berlaku. Perbezaan terjadi kerana maklumat yang digunakan untuk KDNK mengikut kaedah Pengeluaran dan Perbelanjaan adalah daripada sumber-sumber yang berlainan, dan kerap kali wujud jurang pada maklumat yang diperolehi. Perbezaan masa di antara sumber-sumber maklumat juga menyumbang kepada ketidakseimbangan ini. SUT 2015 mengenal pasti transaksi di antara industri-industri dan permintaan akhir dengan agak terperinci. Dengan melakukan kerja pada peringkat yang terperinci dalam bentuk persembahan matriks telah membolehkan pengimbangan yang sistematik.

Di dalam penerbitan ini, pelarasan telah dibuat bagi menyamakan bekalan dan penggunaan barangan dan perkhidmatan. Amalan ini menggunakan sepenuhnya maklumat yang ada dan pengetahuan teknikal yang mendalam berhubung dengan sumbangan setiap item kepada KDNK mengikut kaedah Pengeluaran dan Perbelanjaan.



PEMBANGUNAN MASA HADAPAN

Maklumat dalam penerbitan ini menerangkan kaedah-kaedah yang digunakan sehingga kini. Walau bagaimanapun, apabila terdapat sumber data baru atau metodologi baru yang disarankan daripada SNA, data akan diselaraskan dalam penyusunan dan penyelidikan lanjut akan dibuat bagi memperbaiki kaedah yang digunakan. Oleh yang demikian, adalah dijangkakan perubahan terhadap data dan kaedah akan dilakukan secara berterusan. Perubahan seumpama ini akan diperkenalkan bagi mengekalkan kesinambungan data siri masa.

ESTIMATION OF PRODUCTION



AGRICULTURE SECTOR

METHODOLOGY

Census data and Supply & Use Tables for year 2015 is incorporated in the estimation of output at the current prices. For the year where census data is unavailable, quantity of production and relevant prices information have been used. **Output** also includes estimation of fixed capital formation arising from:

- new plantings (for Rubber, Oil Palm and Other Agriculture);
- breeds (for Livestock); and
- planted logs but has not attained the maturity to be cut (for Forestry and Logging).

Estimation of **intermediate consumption** at constant prices are using the input-output ratio which is updated based on the latest data obtained.

Value added at current prices is obtained by inflating both output and intermediate consumption. For the year where census data is unavailable, estimates of production are based on the monthly production statistics.

DATA SOURCES

RUBBER

- Monthly Rubber Statistics, Malaysia
- Annual Rubber Statistics, Malaysia
- Malaysian Rubber Board
- Monthly External Trade Statistics

OIL PALM

- Malaysian Palm Oil Board
- Annual Report from the Main Oil Palm Plantation Companies
- Monthly External Trade Statistics

LIVESTOCK

- Department of Veterinary Services, Peninsular Malaysia
- Department of Veterinary Services, Sabah
- Department of Veterinary Services, Sarawak
- Monthly External Trade Statistics
- Ministry of Agriculture and Agro-Based Industry, Malaysia

OTHER AGRICULTURE

- Ministry of Plantation Industries and Commodities
- Ministry of Agriculture and Agro-Based Industry, Malaysia
- Malaysian Pineapple Industry Board
- National Kenaf and Tobacco Board, Malaysia
- Malaysia Pepper Board
- Federal Agriculture Marketing Authority

FORESTRY AND LOGGING

- Department of Forestry, Peninsular Malaysia
- Department of Forestry, Sabah
- Department of Forestry, Sarawak
- Monthly External Trade Statistics
- National Timber Industry Policy (NATIP)

FISHING

- Department of Fisheries, Malaysia
- Monthly External Trade Statistics



MINING AND QUARRYING SECTOR

METHODOLOGY

Output and intermediate consumption estimation at current prices is based on census/ annual surveys data. For the year where census/ annual surveys data is unavailable, the quantity of production and prices information of crude petroleum, condensate, natural gas and other mining have been used. For other mining & quarrying and support services activities, latest available census/ annual surveys data is being used to derive an input-output ratio.

Value added at constant prices is obtained by deflating both output and intermediate consumption. For the year where census/ annual surveys data is unavailable, estimates of other mining & quarrying production are used based on the production statistics from Minerals and Geoscience Department.

DATA SOURCES

PETROLEUM AND NATURAL GAS

- Economic Census of Petroleum and Natural Gas
- SUT 2015
- Petroliaam Nasional Berhad (PETRONAS)
- Annual Economic Statistics Mining of Petroleum and Natural Gas

OTHER MINING & QUARRYING AND SUPPORTING SERVICES

- Economic Census of Mining and Quarrying
- SUT 2015
- Annual Economic Statistics Mining of Petroleum and Natural Gas
- Quarterly National Accounts Survey
- Minerals and Geoscience Department



MANUFACTURING SECTOR

METHODOLOGY

Output is realigned with the Supply & Use Tables for year 2015. Census/ annual surveys data are used in the estimation. The government accounts data provide information on taxes levied on the commodities of Manufacturing industries. This is to allow the estimates of output at producers' prices.

For the assembly of motor vehicles, electronics, fabricated metal and palm oil processing, adjustments have been made to output for assembling/ processing done on contract/ fee by others.

Estimation of **intermediate consumption** at constant prices are using the input-output ratio of census/ annual surveys. **Value added** at constant prices is obtained by deflating both output and input. For the year where census/ annual surveys data is unavailable, estimates of production are based on the value from Monthly Manufacturing Survey and Index of Industrial Production with the assumption that changes of input move at the same rate as the changes of output at constant prices.

DATA SOURCES

- Economic Census of Manufacturing
- SUT 2015
- Annual Economic Survey
- Index of Industrial Production
- Monthly Manufacturing Survey
- Monthly External Trade Statistics
- Accountant General's Department of Malaysia (JANM)



CONSTRUCTION SECTOR

METHODOLOGY

Output is realigned with the Supply & Use Tables for year 2010. The census/ annual surveys are used in the estimation of **output** for this sector. For the year where census/ annual surveys data is unavailable, Quarterly Construction Statistics data has been used in estimating output at current prices. In addition, secondary information on construction associated with the upstream activity of the oil and gas industry is also included. Estimation of **intermediate consumption** is using input-output ratio of latest available census/ annual surveys data.

Value added at constant prices is obtained by deflating both output and input. For the years where census/ annual surveys data are unavailable, estimation are based on Quarterly Construction Statistics with the assumption that changes of intermediate consumption move at the same rate as the changes of output at constant prices.

DATA SOURCES

- Economic Census of Construction
- SUT 2015
- Annual Economic Survey of Construction
- Quarterly Construction Statistics



SERVICES SECTOR

METHODOLOGY

A) PRIVATE SERVICES

Output for Private Services sector is estimated at current prices based on the census/ annual surveys, financial statement and administrative data from various agencies which applies to the following sub-sectors:

UTILITIES

For the year where census/ annual surveys data is unavailable, consumption data is used as a mover to estimate the annual output.

WHOLESALE & RETAIL TRADE

Census of Distributive Trade 2014, Wholesale & Retail Trade Census 2019 and estimation of Annual Economic Survey are used as a benchmark. For the years where census/ annual surveys data is unavailable, Monthly Survey of Distributive Trade data and Index of Distributive Trade are used as a mover to estimate the annual output.

FOOD & BEVERAGE, ACCOMMODATION, TRANSPORTATION & STORAGE, INFORMATION AND COMMUNICATION, REAL ESTATE, BUSINESS SERVICES, PRIVATE EDUCATION, PRIVATE HEALTH AND OTHER PRIVATE SERVICES

For the year where census/ annual surveys data is unavailable, Quarterly Survey of Services and Index of Services data are used as a mover to estimate the annual output.

FINANCE

Main output consists of explicit service charges and FISIM. FISIM is calculated based on reference rate method as recommended in 2008 SNA. Allocation of FISIM is made according to the composition of stock of loans and deposits in the banking system.

INSURANCE

Output at current prices is derived by adding premium income and net investment income minus claims paid.

OWNER OCCUPIED DWELLINGS

The number of owner occupied houses from Population and Housing Census and information on average rental by types of dwelling from Household Expenditure Survey are used as a benchmark to estimate output at constant prices. For the subsequent years, output at constant prices is extrapolated based on changes in housing stock which includes the increased proportion factor of home ownership population in Malaysia.

NON-PROFIT INSTITUTION SERVING HOUSEHOLDS (NPISHs)

For the year where census/ annual surveys data is unavailable, total population data is used as a mover to estimate the annual output at constant prices.

DOMESTIC SERVICES TO HOUSEHOLDS

Total population data is used as a mover to estimate the annual output at constant prices.

Relevant price indices are used to deflate output to arrive at constant prices. Estimation of **intermediate consumption** at constant prices are using input-output ratio which is updated based on the latest data available. **Value added** is derived as residuals by subtracting intermediate consumption from output.

B) GOVERNMENT SERVICES

This industry is categorised as non-market producer, thus the value added is obtained from compensation of employees, pension allocated to the current employees and Consumption of Fixed Capital (COFC). Compilation is based on the data of Federal Government, State Government, Statutory Bodies and Local Authorities. Constant value added estimation has been elaborated in Government Final Consumption Expenditure.

DATA SOURCES

Data Sources	Sub-sectors														
	Utilities	Wholesale & retail trade	Food & beverage	Accommodation	Transportation & storage	Information & communication	Finance	Insurance	Real estate	Business services	Private education	Private health	Other services	Owner occupied dwellings	Non-profit institution serving households (NPISHs)
1 Economic Census	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2 Supply & Use Tables 2015	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3 Census of Distributive Trade		✓													
4 Annual Economic Statistics	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
5 Monthly Survey of Distributive Trade		✓													
6 Quarterly Survey of Services			✓	✓	✓	✓			✓	✓	✓	✓			
7 Population and Housing Census													✓	✓	✓
8 Household Income, Expenditure and Basic Amenities Survey													✓		
9 Labour Force Survey															✓
10 Central Bank of Malaysia							✓	✓							
11 Accountant General's Department of Malaysia (AGD)															✓
12 Financial statements of the State Government, Local Authorities and Statutory Bodies															✓
13 Public Services Department															✓
14 Retirement Fund Incorporated															✓
15 National Property Information Centre (NAPIC)									✓				✓		
16 Companies Financial Statements	✓						✓	✓							



IMPORT DUTIES

METHODOLOGY

The final value is obtained from the annual report of the Accountant General. For the recent year, monthly accounts which obtained from Royal Malaysian Customs Department has been used in the estimation.

The current prices import duties are deflated by the relevant prices to arrive import duties at constant prices.

DATA SOURCES

- *Accountant General's Department of Malaysia (AGD)*
- *Royal Malaysian Customs Department*

ESTIMATION OF EXPENDITURE



PRIVATE FINAL CONSUMPTION EXPENDITURE

METHODOLOGY

Private Final Consumption Expenditure consists of Household Final Consumption Expenditure and Final Consumption Expenditure of Non-Profit Institution Serving Households (NPISHs).

Household Final Consumption Expenditure is analysed according to the commodity and services group based on the Classification of Individual Consumption by Purposes (COICOP) which is divided into four categories: durable goods, non-durable goods, semi-durable goods and services.

To calculate the relevant services consumption expenditure, part of output at current and constant prices for the respective services is taken as a mover to obtain the consumption at current prices.

FISIM is also included in Household Final Consumption Expenditure estimation.

Household Income, Expenditure and Basic Amenities Survey has been used as a benchmark to derive annual expenditure estimate at current prices and distribution of expenditure by type of goods and services.

The expenditure at constant prices is obtained by deflating the estimates at current prices of each item using relevant price indices.

Final consumption expenditure of NPISHs is obtained by summing up intermediate consumption and compensation of employees and deducting receipts from sales.

Actual Final Consumption of Households

- = Household final consumption expenditure
- + Final consumption expenditure of NPISHs
- + Individual consumption expenditure of general government
(health, education and social security and welfare)

DATA SOURCES

- Household Income, Expenditure and Basic Amenities Survey
- SUT 2015
- Economic Census
- Annual Economic Survey
- Quarterly Balance of Payments
- Monthly Survey of Distributive Trade
- Quarterly Survey of Services
- Monthly External Trade Statistics
- Central Bank of Malaysia
- Malaysia Tourism Promotion Board



GOVERNMENT FINAL CONSUMPTION EXPENDITURE

METHODOLOGY

Government Final Consumption Expenditure is equal to the output of government less value of sales plus FISIM. Output is equal to value added plus intermediate consumption.

The constant price estimates of value added is obtained by deflating salaries and wages with an index of Federal Government starting wage rate. In constructing the wages index, salary revisions and bonus payments have been treated as price increases while the annual civil service increment has been treated as an increase in productivity. Meanwhile, the constant price for intermediate consumption is obtained by deflating the intermediate consumption using relevant price indices. Consumption of Fixed Capital (COFC) at constant prices is derived using an integrated Perpetual Inventory Method (PIM) and the current price is estimated by inflating the COFC for the respective assets using appropriate price indices. This methodology is consistent with the recommendations by 2008 SNA.

Government Final Consumption Expenditure can be categorised into individual consumption of general government (also known as social transfers in kind) and collective consumption of general government.

Collective consumption of general government is part of government consumption expenditure acquired by the general government such as general public services, defence, public order and safety and economic affairs. These expenditures are provided by general government simultaneously to all members of the community or to all members of a particular sector of the community. There is no mechanism of redistributing such resources among individual household.

Individual consumption of general government is expenditures incurred by general government but actually acquired by households such as education, health, social protection.

DATA SOURCES

- Accountant General's Department of Malaysia (AGD)
- Financial statements of the State Government, Local Authorities and Statutory Bodies



GROSS FIXED CAPITAL FORMATION

METHODOLOGY

Estimation of Gross Fixed Capital Formation (GFCF) by type of assets is divided into three type of assets i.e. Structure, Machinery & Equipment and Other Assets. GFCF of structure is calculated based on the value of output from construction activities coupled with information of oil & gas investment. The costs of ownership transfer for structure are estimated and appended; to obtain the value at purchasers' prices.

GFCF of Machinery & Equipment are estimated by applying the SUT 2015 ratio on the output which was obtained from census/ annual surveys and imports of capital goods. For Other Assets, the estimation are based on Annual Economic Statistics Mining of Petroleum and Natural Gas, exploration expenditure of oil & natural gas and various data from government agencies.

METHODOLOGY AND DATA SOURCES

GFCF by sector is classified into Public and Private sectors. The value of Public GFCF is obtained from the Capital Expenditure for General Government Accounts and Survey of Capital Expenditure for Public Establishments. Meanwhile, the estimates of Private GFCF is derived from information of census/surveys on the private establishment and various related administrative data.

GFCF at constant prices is obtained by deflating the GFCF at current prices with the relevant price indices.

DATA SOURCES

- SUT 2015
- Economic Census
- Annual Economic Surveys
- Annual Economic Statistics Mining of Petroleum and Natural Gas
- Ministry of Agriculture & Food Security of Malaysia and related agencies
- Quarterly Construction Statistics
- Monthly Manufacturing Survey
- Monthly External Trade Statistics
- Quarterly Balance of Payments
- National Film Development Corporation Malaysia (FINAS)
- Recording Industry Association of Malaysia (RIM)
- National Research and Development Survey, MASTIC
- National Property Information Centre (NAPIC)
- Financial Statement of Federal Government, State Government, Local Authorities and Statutory Bodies
- Survey of Capital Expenditure for Public Establishments
- Financial Statements from Companies



CHANGES IN INVENTORIES

METHODOLOGY

Changes in inventories is defined as the difference between additions to and withdrawals from inventories. In principle, it is derived by subtracting opening inventories from closing inventories.

Generally, inventories generate holding gains or losses as the market prices of the goods held in stock rise or fall. These gains or losses are not the result of production process and thus cannot contribute to GDP compilation.

Opening inventories at current prices need to be deflated by using prices at prevalent time of entry to arrive at constant prices. Then the opening inventories at constant prices are inflated by using prices ruling at the time of closing inventories to arrive at current prices. Subsequently, the subtraction of closing inventories against opening inventories will give the changes in inventories without holding gain or losses effect.

DATA SOURCES

- Monthly Manufacturing Survey
- Annual Rubber Statistics, Malaysia
- Monthly Survey of Distributive Trade
- Malaysian Palm Oil Board
- Department of Veterinary Services
- Federal Government Accounts



VALUABLES

METHODOLOGY

Valuables is defined as products bought for the purpose of investment where the purchase is made with the assumption that the value of the products will increase in the future. Examples of valuables are precious metals and stones, antiques, works of art and etc. Value at current prices is obtained from various indicators and data sources such as imports data, manufacturing survey and distributive trade. These data is then deflated by the relevant price indices to arrive the value at constant prices.

DATA SOURCES

- *Monthly Survey of Distributive Trade*
- *Monthly Manufacturing Survey*



EXPORTS AND IMPORTS

METHODOLOGY

Exports and Imports data consist of goods and services. Nevertheless, the value of exports and imports do not include borrowing and lending, interest and other transfers between Malaysians and the rest of the world.

Values on merchandise trade are compiled from the Customs Declarations processed by the Department while value of services is obtained from various sources including national carriers, Bank Negara Malaysia, Immigration Department and various surveys such as the Quarterly Survey of International Investment and Services, Survey of Foreign Airlines Companies in Malaysia and Census of Shipping Companies in Malaysia.

The merchandise trade records are adjusted for transactions that are not otherwise covered (e.g. exports of water) or which are not transacted between Malaysia and the rest of the world (e.g. goods in transit through Malaysia and goods received for repairs and re-export). Measures of travel receipts and payments are obtained from various sources including surveys carried out by the Tourist Development Corporation.

The value of exports and imports are recorded on a change of ownership principle which is the flow of goods between the country owning the goods and the country providing the processing services should not be recorded as imports and exports of goods.

DATA SOURCES

- *Monthly External Trade Statistics*
- *Quarterly Balance of Payments*
- *Central Bank of Malaysia*
- *Malaysia Tourism Promotion Board*
- *Immigration Department of Malaysia*



RECONCILIATION

The estimates of production and expenditure should be the same theoretically. However, this does not happen practically. Differences occur because the information used for GDP by Production and Expenditure approach comes from different sources and often there are gaps in the information available. Timing differences between information sources also contribute to the imbalance. The SUT 2015 identify transactions between industries and final demand in considerable detail. Working at this very detailed level within a matrix presentation allows the national accountants to bring the system into balance.

In this publication adjustments have been made to equate the supply and use of goods and services. This practice makes the best use of the information available and of the knowledge that the national accountants have of each item contributing to the GDP by Production and Expenditure approach.



FUTURE DEVELOPMENTS

The information which is provided in this publication describes the methods used to date. However, as new data sources or new methodology recommendations from SNA become available, the data will be incorporated in the compilation and further research will be made to improve the current methods. Hence, it is expected that the changes in data and methods will be made on a continuous basis. Such changes will be introduced so as to maintain the continuity of the time series.