

**COUNTRY REPORT OF**

**PAKISTAN**

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**PAKISTAN**

Pakistan, officially the Islamic Republic of Pakistan is a sovereign country in South Asia. With a population exceeding 191 million people, it is the sixth most populous country and with an area covering 796,095 km<sup>2</sup>, it is the 36th largest country in the world in terms of area. Pakistan has a 1,046-kilometre coastline along the Arabian Sea and the Gulf of Oman in the south and is bordered by India to the east, Afghanistan to the west, Iran to the southwest and China in the far northeast respectively. It is separated from Tajikistan by Afghanistan's narrow Wakhan Corridor in the north, and also shares a maritime border with Oman.

It is a member of the United Nations, the Commonwealth of Nations, Shanghai Cooperation Organization, ECO, Asian Infrastructure Investment Bank, G-20 developing nations, founding member of the Organization of Islamic Cooperation, SAARC.

Capital: Islamabad, Official Languages: English, Currency: Pakistani Rupee

Regional Languages: Punjabi, Pushto, Sindhi, Saraiki, Balochi, Kashmiri, Hindko, etc.

Religion: Islam, Government Setup: Federal Parliamentary Republic,

Area: 796,095 km<sup>2</sup>, GDP: \$928.433 Billion, Per Capita: \$4,886,

**NATIONAL ACCOUNTS**

**Non-Observed Economy:** Although non-observed economy constitutes a huge amount of value addition in the country, however due to lack of resources and technical expertise, this has not been covered so far.

**Volume Measure:** An important issue in volume measure is the choice of the base year. The SNA favours the use of a chain base year.

A base year is the year for which price data at the most detailed level are collected and serve as benchmark data to weight different quantities to obtain one single volume index. The change of a base year affects real growth rate. Consequently, the price base period is the period whose prices are used as denominators in calculating relative's price  $P_t/P_0$  (Where  $P_0$  is the base period price). The quantity base period is the period whose quantities are used as denominators in calculating relative quantities  $Q_t/Q_0$  (Where  $Q_0$  is the base period quantity).

A reference year is simply any given year selected so that a series of values with different base years can be compared. The base period in an index number is taken to be equal to 100. A change in the reference year should not change growth rates.

The choice of base year and the choice of reference year in principle is unrelated issue. For the calculation of price and volume measures, the problem is the choice of base year.

There is the need to re-reference or chain whenever data is calculated with the previous year as the base year and data is to be expressed with respect to a fixed reference year. This system which always uses the previous year as the base year is also known as a system of 'chain indices'. However, for the calculation of the year-to-year price and volume changes, no chaining is required. In Pakistan the base year is 2005-06 and we use the volume measures for further reference years.

**Research and development Expenditures:** Research & development expenditures of government sector is carried out by the government budget documents. Private expenditures on research and development is being covered by surveys in base year.

**Quality Assurance Status:** In current practice SNA 2008 Standards, PISIC revision 4 classifications developed on lines of ISIC review codes, CPC version 2, COFOG, HS-7 Code for trade, VB-6 for balance of payment.

### **Issues:**

It also encompasses the various emerging modern issues such as Satellite Accounts (Satellite Accounts use in only NHA.), Environmental Accounting and Social Accounting Matrix. Treatment of National Balance Sheets in an elaborated and systematic way is a praiseworthy addition to the new SNA which was earlier left for further research and agreement. However, the central framework of the SNA retains the supply & use (working on SUT 2010-11), Non-Observed Economy is not being covered, Applying Fixed Base Method (Laspyre's) used. Fisher ideal cannot be used, At this stage Pakistan not working on Institutional sector Accounts.

## CURRENT PRACTICES AND STATUS

### Profiling National Accounts:

In Pakistan, the National Accounts estimates may be divided in to two categories:

A) Annual Regular Accounts, and      B) Adhoc Developmental Exercises.

### Annual Regular Accounts

1. Gross Domestic Product (GDP)/Gross National Income (GNI) (At Current and Constant Basic Prices) Industrial Origin
2. Expenditure on GDP (At Current and Constant Market Prices)
3. Estimates of Gross Fixed Capital Formation (GFCF) by Industrial Origin at Current and Constant Market Prices in respect of Private & Public Sectors and General Government
4. Composition of General Govt. Final Consumption Expenditure by COFOG

### Adhoc Developmental Exercises

i) Input Output (Inter industry) Table for 1984-85, 1989-90 and 1990-91.

1. Supply and Use Matrices
2. Inter Industry Flow Matrix
3. Direct & Total Requirement Coefficient Matrices

ii) Institutional Sector Accounts for 1984-85, 1989-90, 1990-91.

1. Non-Financial Enterprises
2. Financial Institutions
3. General Government
4. Household & Un-incorporated Enterprises
5. Flow of Funds Accounts
6. Rest of the World (ROW) Accounts

## APPROACHES FOR SECTORAL ESTIMATES

**1: Production Approach:** It measures the contribution to output made by each producer. It is obtained by deducting from the total value of its output the value of goods and services it has purchased from other producers and used up in producing its own output. Total value added by all producers, adjusting taxes and subsidies equals GDP.

Gross Value Added at basic prices= Output at basic prices - Intermediate consumption at purchasers' prices

GDP = Output – Intermediate consumption + Taxes on products – Subsidies on products

GDP = Gross value added + Taxes on products – Subsidies on products

**2: Income Approach:** In this approach, consideration is given to the costs incurred by the producer within his own operation, the income paid out to employees, taxes (less subsidies) on production, consumption of fixed capital, and the operating surplus. All these add up to GDP at market prices.

GDP = Compensation of employees + Taxes - Subsidies + Gross operating surplus / Mixed income

**3: Expenditure Approach:** This approach looks at the final uses of the output for private consumption, government consumption, capital formation and net of imports & exports.

GDP = Final consumption + Gross capital formation + Exports – Imports

GDP in Pakistan is estimated as per guidelines provided by the UNSNA. For the purpose of GDP estimation by sectoral activities (current & constant basic prices) production, income and expenditure approaches are applied. The economy is divided into the following economic activities (sectors).

## **AGRICULTURE**

Crops production and livestock are the two major activities covered under this heading. Cotton ginning has been classified as agriculture activity instead of manufacturing, hence shifted to crops sub-class. Flower production has been estimated through survey and included in the sub-class. Animal husbandry and hunting (both other than government and hence private) are the new additions adjusted along with livestock. For the purposes of computation of value added estimates.

## **INDUSTRY**

### **Mining and Quarrying**

According to the Pakistan Standard Industrial Classification (PSIC), 2007, mining and quarrying include the extraction of minerals occurring naturally as solids (coal and ores), liquids (petroleum) or gases (natural gas). It is covered in section C of PSIC 2007 and includes divisions 10 to 14. Latest revision PSIC 2010 rev. 4 which is parallel to the latest revision ISIC 4 covers in section B, from division 05 to 09. The main approach for Pakistan's National Accounts is a

functional (or “commodity”) approach. This means that compilation of output, intermediate consumption and value added is based on commodity data.

For the base year data has been collected from all oil and gas corporations through their annual reports and through questionnaires. Data from the latest Mining Census has been used as well. In using these we apply an enterprise approach which, however, is confined to the oil and gas companies and which will be embedded in the overall functional approach for all minerals.

## **Manufacturing**

The manufacturing sector comprises of following three sub sectors:

1. Large Scale Manufacturing (QIM)
2. Small Scale Manufacturing (Growth)
3. Slaughtering (Growth)

## **Electricity generation & distribution and gas distribution**

The GVA of both Electricity generation & distribution and gas distribution have been compiled by applying the establishment approach. In 1999-2000 base, water supply was also part of this group but in 2005-06 base it has been shifted to general government sector being a non-market producer. It is also according to the revised classification (PSIC 2007 or PSIC 2010).

## **Electricity generation and distribution**

WAPDA is the sole producer of Hydel power. Its share is 33% in the generated units (GWH) of electricity in 2005-06. It also generates thermal power which contributed 24% to total generation in 2005-06. WAPDA alone contributed 57% to the total generation. KESC contributes 10% and IPPs contribute 31%. The share of nuclear energy generation is around 3% only. WAPDA and KESC purchase electricity from the other producers and distribute it. Captive units generally supply what is extra with them. In electricity industry the subsidies have been incorporated in the output.

GVA is derived from the output and intermediate consumption estimates. WAPDA is major the contributor, its contribution to value added is 45 per cent. IPP’s are the second major share holder in value added.

Output, intermediate consumption and GVA at current prices for WAPDA and KESC, Independent power producers have been calculated for each year which has been converted into constant prices by applying the deflator of electricity. The captive units are being treated along with IPP’s.

## **Gas Distribution**

In Pakistan gas distribution only comprises of Sui Southern, Sui Northern and Mari Gas companies. The annual reports of the companies are a major source of mature data. Energy year book 2006 and onward are another authentic source for details. It has been tried to combine and to reconcile these two sources as far as possible.

Gross value added is calculated as output minus intermediate consumption. Output, intermediate consumption and GVA at current prices for gas distribution sub-sector have been calculated for each year by using data from annual reports which has been converted into constant prices by applying the deflator of gas.

# **Services industries**

## **Wholesale and retail trade**

Wholesale and retail trade covers a full Section (“G”) in the Pakistan Standard Industrial Classification (PSIC) 2007. The full title of this section is “Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods”. In the PSIC Rev. 4, 2010, the respective section ‘G’ now has a shorter title: “Wholesale and retail trade; repair of motor vehicles and motorcycles”.

## **Hotels and Restaurants**

PBS has conducted a Survey of Wholesale & Retail Trade and Hotels & Restaurants in 2006-07 for the change of base of national accounts from 1999-2000 to 2005-2006. The growth rate calculated from 1984-85 to 2006-07 based on the surveys, at the 1980-81 prices is 4.92%. The estimates of 1999-2000 base have been raised with fixed growth rate of 4.92 and same have been converted into current prices by applying CPI General to derive the base year estimate for the year 2005-06. The benchmark estimates of GVA at constant prices for the year 2005-06 have been extrapolated for subsequent years by applying a fixed growth rate of 4.92 per cent. The estimates at constant prices have been converted into current prices by applying the CPI general.

## **Transport, storage and communication**

Transport, storage and communication sector has been covered according to the PSICs (2007 & 2010). The universe for this sector is comprised of the provision of passenger or freight transportation; by land, water and air. It includes rail, road, pipeline, water, air and associated activities such as terminal and parking, cargo handling, storage etc. The renting of transportation equipment with operators is also part of this sector. Postal and courier services, and Telecommunications and related services are also covered here.

A combination of survey/studies and company reports has been used as source of data to derive the base year estimates for this sector. To enhance the coverage and update the estimates, studies were conducted on Railways franchised booking agents, inter-city & intra-city road transport (Mechanized & Non-Mechanized) , Inland Water transport ( Boats Inland), Shipping, goods forwarding and custom clearing agents, International freight forwarders, Travel agents/ Tour operators, Courier services & franchised post offices, Cable operators & internet service providers and Public call offices & payphone companies. Un-registered part of non-mechanized road transport has been adjusted approximately as double of registered part of non-mechanized road transport. Data has also been extracted from the annual reports of Pakistan Railways, APL, PARCO (oil pipeline), FOTCO, Pakistan National Shipping Corporation (PNSC), Domestic airlines (PIA, SAI, Air Blue), Foreign airlines, KPT, PQA, KICT, QICT, PICT, Engro Vopak Container Terminal, CAA, Pakistan Post Office, PTCL, NTC, PTA, Pak Data Comm., Telecard, Telecom Foundation (TF) and World call Telecom Limited etc. The ratios of 1999-2000 base have been used to derive the estimates of Storage and warehousing activities.

The estimates for each category have been prepared separately following production approach whereas gross value added has been computed by deducting the value of intermediate consumption from the value of output.

### **Other Private Services**

A combination of production and income approaches have been applied to estimate the contribution of private services sector in national economy which involves collection of data on number of service establishments classified by type of service and data on components of value added. Production approach has been applied to estimate the GVA of renting of machinery, computer related activities, education, health & social work, recreational, culture, sporting and other service activities whereas income method is used to work out income membership organizations, NGO's and domestic staff.

The base year GVA of Renting of Machinery and Equipment, Computer Related Activities (Software Export Board), education, membership organization, Recreational, Cultural and Sporting Activities, was obtained from the survey of "Social, Recreational, Community & Personal Services, Real Estate Activities and Renting of Machinery /Equipment 2007-08". The 1999-2000 based estimates at current prices have been used as benchmark estimates for the new base year 2005-06 for Computer Related Activities (PASHA), social work, other business and other service activities. National health account data has been used to derive the estimate of health related activities. The contribution of NGO's and domestic staff has been estimated from the NGO's Survey 2005-06 and Pakistan Social & Living Standards Measurement (PSLM) Survey 2005-06.

For extrapolation at constant prices QIM of heavy machinery is used for renting of machinery & equipment, new registration of engineering firms for computer related and other business activities, new enrolment for education, growth in health personnel for health and social work whereas a fixed growth rate of 5.40 percent i.e. the annual compound growth rate of 3-4 rooms between 1998 and 1981 censuses has been used for membership organization, NGO's, other service activities and domestic staff. The various categories of CPI i.e. general,





The final consumption expenditures of general government can be classified in several ways. In particular, they may be classified:

1. According to whether the goods or services have been produced by market or non-market producers;
2. According to whether the expenditures are on collective services or individual goods or services;
3. By function or purpose according to the classification of the functions of government (COFOG); or
4. By type of good or service according to the Central Product Classification (*CPC*).

The classification of the functions of government (COFOG) is a classification of transactions designed to apply to general government and its subsectors. There are ten classes in the classification as follows:

1. General public services;
2. Defence;
3. Public order and safety;
4. Economic affairs;
5. Environmental protection;
6. Housing and community amenities;
7. Health;
8. Recreation, culture and religion;
9. Education;
10. Social protection.

The sources for the Federal Government estimates are the federal budgets, the ministry of finance data. Expenditure and revenue data are available in detail. Autonomous bodies which are non-market producers have been allocated to the government while the autonomous bodies which mainly are market producers have been allocated to their respective corporation sector (in most cases non-financial corporation's) and to their respective industries by PSIC. The data of other tiers of the structure are also available in the form of budget documents. The figures for provincial/ district governments, local bodies, cantonment boards etc. have been taken from their budgetary documents. The figures for social security funds have been taken as components of the federal and provincial level structure. However, the figures for the employees' old age benefit institution (EOBI) has been included in the financial corporation sector, it deals with the pension fund. The statistical information is available on industry as well functional categorization.

Market output for the government is measured on the basis of receipts/ revenues from inspection fees, museum tickets etc.. The value of the non-market output provided without charge to household is estimated as the sum of costs of production as follows:

- Intermediate consumption,
- compensation of employees,
- consumption of fixed capital,
- Other taxes (less subsidies) on production.

GVA of this sector has been compiled by income approach by adding compensation of employees both in cash & kind, consumption of fixed capital and other taxes less subsidies on production.

## **Finance & insurance**

Subsectors of the financial corporations sector

1. Central Bank
2. Deposit-taking corporations except the Central Bank
3. Money market funds (MMF)
4. Non-MMF investment funds
5. Other financial intermediaries except insurance corporations and pension funds (ICPF)
6. Financial auxiliaries
7. Captive financial institutions and money lenders
8. Insurance corporations (IC)
9. Pension funds (PF)

## **Output and value added of the State Bank of Pakistan**

The total output of State Bank of Pakistan is sum of intermediate consumption, compensation of employees and consumption of fixed capital. The market output of SBP is directly compiled and is comprised of all fees, charges etc. The difference between total output and market output is treated as the non-market output. Intermediate Consumption of SBP is comprised of note printing charges, agency commission, establishment costs and other charges.

## **Output and value added of the scheduled banks**

The most relevant component of the output of the financial institutions is the “FISIM” of the scheduled ("commercial") banks. The FISIM has been calculated according to a reference rate, confined on the asset side of the banks to loans and on the liability side to transferable deposits and other deposits by using banking statistics of the State Bank of Pakistan which are published on its website. “KIBOR” (Karachi Inter-bank Offered Rate) has been used as the reference rate. The figures for financial services in return for explicit charges have been directly taken from the profit & loss accounts of the banks and it includes “fees, commissions and brokerage”, “income from dealing in foreign securities” and “income from dealing in foreign currencies”

## **Intermediate consumption**

Intermediate consumption for scheduled banks for the base year 2005-06 have been calculated as the difference between administrative expenses and compensation of employees and donations of the banks as per profit & loss account for each bank. For the non-base years

administrative expenses have been multiplied with the ratio of those positions which in the base year really do fall under intermediate consumption.

The overall output of the “final” year has been extrapolated with the increase of deposits plus loans at current prices and at constant prices, respectively. For intermediate consumption we have applied the ratio of the “final” year at current and at constant prices (deflation with CPI), respectively.

### **Output and value added of the non-scheduled banks and auxiliaries**

The term "non-scheduled banks" are classified as Non-Banking Financial Corporations (NBFC) by the State Bank. NBFCs also cover pension funds and insurance corporations. NBFCs are either "other deposit accepting institutions" or non-depository institutions. The non-depository institutions either are financial intermediaries (mainly mutual funds and asset management companies) or financial auxiliaries like stock exchange companies, stock exchange brokers or money exchange companies.

Other deposit accepting institutions includes investment banks and development financing institutions (DFIs), microfinance institutions, housing finance companies (under other deposit accepting), and leasing corporations (under other deposit accepting).

Non-Depository Institutions (financial intermediaries) includes Mutual funds, Housing finance companies, Leasing companies and Modarabas.

The ratios resulting from calculations with the scheduled banks have been applied to the loans and deposits of the non-scheduled banks. FISIM on deposits of the non-scheduled banks is calculated analogously, loans and deposits to be taken as annual average each.

Non-depository institutions (financial auxiliaries) include exchange companies, stock exchanges, brokerage houses, asset management companies.

### **Housing Services:**

Housing sector is comprised of three sub-sectors namely Ownership of Dwellings, Real Estate and Cooperative Housing Societies. The imputed output, intermediate consumption and value added of Ownership of Dwellings is recorded as part of PSIC 2007 section K division 70 Real Estate activities. There is a change in classifications for these activities at section level in PSIC 2007 (section K) and PSIC 2010 (section L). In the base 1999-2000, only housing services (Division 70 of section K) in the name of “Ownership of Dwellings” were covered and the remaining activities were covered under other parts of “services”. In PSIC 2010 (equivalent to ISIC Rev. 4), real estate services have been classified separately under section L, Division 68. Housing services is the major activity of the section and needed to be taken up separately and then summed up with other minor activities.

## **Ownership of Dwellings:**

According to the international recommendations and practices the estimates of value added in this sector are measured by the rent accruing from ownership of dwellings rented as well as of self-occupied or rent free. This requires cumulative increase of houses and their respective rent. To prepare estimates of value added, the number of occupied privately owned houses in urban and rural areas has been taken from the Housing Census, 1998 and 1981. The number of dwelling, gross rentals/output at basic prices, for the year 2005-06 has been estimated separately for urban and rural areas by applying the annual compound growth rate of dwellings between 1998 and 1981. The estimates of annual average rentals for urban and rural areas have been derived from the rent survey of 2007-08 conducted by PBS for the change of base of national accounts from 1999-2000 to 2005-06. The intermediate consumption for the base year 2005-06 includes the repair & maintenance and commission paid to real estate agents. The difference between output at basic prices and intermediate consumption at purchaser's prices has been used to derive the GVA at basic prices for the base year 2005-06.