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Trends of public expenditure in Punjab

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Abstract
The purpose of this work is to study in detail the role of public expenditure in the development of primary, secondary and tertiary sector in Punjab. Public expenditures are those expenditure which are made by the government, social security agencies, local governments and organizations affiliated with them. In this paper Public Expenditure is divided into two classes i.e., Expenditure of Revenue Account and Expenditure of Capital Account. Development expenditure includes the money spent on things like economic, social, and community services. The costs incurred for administrative support, defence support, debt servicing, subsidies, etc. are considered non-developmental expenses .Civil expenditures such as general services, social and community services, and economic services, as well as defense expenditures, are examples of revenue expenditures. On the other hand, capital expenditures include expenses for things like defense, general services, social and community development, and economic development. Public expenditure has led to the tremendous growth in the state of Punjab. Public spending affects GDP right away because it is a component of GDP. In other words, a boost in public spending results in a corresponding growth in GDP. Additionally, because income is a key factor in determining consumption, an increase in income will be followed by an increase in consumption, creating a positive feedback loop between the two, just as it does in the event of shocks to export, investment, or autonomous consumption.

Keywords: Public expenditure, primary, secondary, tertiary sector, revenue, capital account

Introduction
Defining public expenditure and its role in the development
Public expenditures are those expenditure made by the government, social security agencies, local governments and organizations affiliated with them.
They fall into three types in particular:
1. Operating costs, which help keep public services functioning smoothly (current staff and maintenance expenditures, supply purchases etc.)
2. Redistribution expenditures, such as subsidies for businesses and households as well as financial benefits granted to households (such as retirement pensions, family allowances, minimum social benefits etc.)
3. Investment spending, which strives to upgrade or add to the public sector's productive capital (e.g. research and development expenditure, arms purchases, construction of buildings and infrastructure etc.).

Causes of the rise in public spending
a) **Country size and population:** Nearly all nations are expanding their geographic range. The modern government's operations can be found everywhere, even in no- man's land. Assuming a fixed size for a nation, population growth in developing nations has increased significantly. Public spending in these sectors has increased as a result of the expansion of the government's administrative functions (such as the military, police, and judiciary).
b) **Defense Expenditure:** Threats of war can be blamed for the tremendous increase in public spending. The second part of the 20th century has not seen any major wars. But war still looms large and continues to pose a threat.
c) **State of Welfare:** The modern state is a "welfare state," as opposed to the "police state" of the 19th and 20th centuries. Socialistic ideals are still present even in a capitalist system. Since socialism is acknowledged in this country, current governments have

publicly advocated for the socioeconomic advancement of the general populace.

Numerous socioeconomic initiatives are made to advance human welfare. Large sums of money are spent by modern governments on economic growth. It actively contributes to the creation of commodities and services. The government provides funding for this investment. Along with development initiatives, welfare initiatives have expanded significantly. It invests money in offering a range of social security benefits. Under government patronage, social areas like health and education are given special consideration.

d) **Economic Growth:** A modern government may significantly influence how an economy is shaped. Private investors are completely unable to support a nation's economic growth. Due to the private sector's limitations, modern governments now invest in a variety of industries to promote economic growth.

The presence of economic infrastructure is a major determinant of economic development. The only way to strengthen an economy's structure is to build up its economic infrastructure, such as roads, transportation, and energy. Obviously, the government spends money to fund these activities.

e) **Price Growth:** Increased government spending is frequently attributed to rising prices brought on by inflation.

Types of public expenditure

Developmental and non-developmental expenditures are two different categories of public spending. The former includes the money spent on things like economic, social, and community services. The costs incurred for administrative support, defense support, debt servicing, subsidies, etc. are considered non-developmental expenses

Revenue expenditure and capital expenditure are the two categories of public spending. Civil expenditures such as general services, social and community services, and economic services, as well as defense expenditures, are examples of revenue expenditures. On the other hand, capital expenditures include expenses for things like defense, general services, social and community development, and economic development.

Plan expenditure and non-plan expenditure are additional categories for public spending. Revenue expenditure and capital expenditure are the two broad categories under which non-plan expenses are classified. The first category includes interest payments, defense costs, subsidies, pensions, other general services (including health and education), and economic services (like agriculture, energy, industry, transport and communication, science, technology and environment, etc.) Agriculture, rural development, irrigation and flood control, energy, industry, and mineral resources, among other expenses, are included in plan expenditures.

Canons of Public Expenditure are the rules or guidelines that guide the government's spending decisions. The effectiveness and appropriateness of the expenditure itself are determined by fundamental spending principles. Government must adhere to these guidelines while determining its spending plan. The term "canons of public expenditure" is used to describe these guidelines.

How important public expenditure is?

The ideal financial strategy is to spend little money, and the best tax is the one that is levied in the smallest amount, according to an outdated aphorism. Today, nobody adheres to this viewpoint. J. M. Keynes emphasized the significance of governmental spending in the 1930s.

The term "welfare state" is used to describe the modern state. As a result, the modern government's activities have greatly expanded. Modern governments are involved in a variety of social and economic endeavors, especially in less developed nations (LDCs).

i) **Economic Development:** A poor country cannot undertake significant investments to modify its economic foundation favorably without the help and endorsement of the government. For this reason, the government makes significant investments in the growth of fundamental and important industries, as well as in agriculture and consumer goods. Public spending has a simulative effect on economic growth, employment opportunities, etc. Infrastructure development for the economy is also necessary. A developing nation like India must take on numerous projects, including building roads, bridges, dams, power plants, transportation, and communications systems, etc.

ii) **Fiscal Policy:** Public spending is regarded as a crucial tool for implementing fiscal policy. During a depression, public spending generates and broadens the range of employment options. Therefore, government spending can stop periodic cyclical oscillations. On the grounds that doing so generates income and jobs, it is advised that government spending increase during a depression.

Instead, when inflation becomes a problem for the economy, government spending must be reduced. Because of this, it is claimed that cyclical variations can be significantly reduced by managing public expenditure. In other words, fluctuation in government spending is a component of anti-cyclical fiscal policy.

iii) **Income redistribution:** Public spending is utilised as a potent fiscal tool to achieve a just distribution of income and wealth. There are a lot of public investments that help low-income groups. The government can help the impoverished people's economic situation by offering them subsidies, free healthcare, and educational opportunities.

iv) **Balanced Regional Growth:** Regional inequalities can be reduced by public spending. The government can promote all-around development in underdeveloped areas by redistributing resources there in order to make them competitive with the nation's advanced regions. To sustain cohesion and togetherness among individuals from all regions, this is necessary. Regional expansion that is out of balance supports the rise of disintegration forces. An remedy to these retrograde groups is public spending.

Effect on other factors

Public spending affects GDP right away because it is a component of GDP. In other words, a boost in public spending results in a corresponding growth in GDP. Additionally, because income is a key factor in determining consumption, an increase in income will be followed by an increase in consumption, creating a positive feedback loop between the two, just as it does in the event of shocks to export, investment, or autonomous consumption.

However, the responses of the other economic agents will determine how far this mechanism goes. In order to meet customer demand, businesses must choose between raising pricing or production. Additionally, if consumers see the rise in public spending as a decrease in their after-tax income, consumption may decline proportionally.

Additionally, it is advised that public spending will drive away investment, possibly through an increase in interest rates, which will result in a currency appreciation under a system of floating exchange rates. Then exports would also be replaced.

In more microeconomic terms, public spending may be used to purchase consumer goods and so displace private spending by families, as in the case of pharmaceuticals. In contrast, in other circumstances, such as with education, public spending might lead to increased consumption (books and all the other goods whose consumption depend on culture levels acquired before).

Enduring trends

Whatever the political stance of the government, it has always increased in industrialised countries. Only the tempo is flexible. With a few notable exceptions, public spending has only ever been reduced in absolute terms under extremely tight restrictions, making this endeavour challenging.

Wars are periods of extraordinarily high public spending that are typically followed by a return to normality, unless the demand for social advancement by the ex-soldiers is answered with an expansion of the welfare state.

Business cycle patterns

Depending on the political and institutional stance on the public deficit, public spending may wind up being pro- or anti-cyclical. Some governments respond by cutting public spending and halting public sector hiring and pay. Others choose to increase their spending to boost the economy.

The former runs the danger of worsening GDP dynamics and creating a vicious cycle that can be disrupted by changes in global trade dynamics, inflows of capital, or other factors. The second would result in a significant public deficit while waiting for a recovery in the GDP and perhaps new levies.

However, actual data frequently demonstrate a minimal response of public spending to the cycle. Public spending is typically seen as a stabilizing factor that merely maintains dynamics when the rest "goes awry."

Trends of public expenditure in Punjab

This chapter is concerned with analytical and critical evaluation of the expenditure policies of Punjab state during the period 1992-93 to 2011-12. Such an analysis is sought in terms of the trends and pattern of the state expenditure and its relation to state income. The purpose of this chapter is to study over all trends in state expenditure and its relation to income in the last 30 years of planning and examine the directions of change in the government expenditure policies.

The objectives of public expenditure are determined by the existing requirements of the community and the political ideology of the party in power. Hence, the objectives and programmes of public expenditure may differ over the periods. Yet, a general pattern of the objectives of public expenditure are to provide services for the social, economic and physical welfare and security of the people, to promote the most effective utilization of human and other resources, to stabilize the economy, among other things.

In Punjab, the governments have played a major role for well-being of the public as well as for the economic development. Human development was considered an important policy indicator and all the successive governments have invested more on education and public health. Eradication of poverty too was considered as one of the major tasks of the government expenditure and capital expenditure. Revenue expenditure is further divided into plan and non- plan revenue expenditure. Plan revenue expenditure pertains to central plan and central assistance for states and union territory plans. Non plan revenue expenditure covers a wide variety of general, social and economic services of the government. The major items of non- plan revenue expenditure are interest payments, defense services and subsidies. While those expenditures of government which lead to the creation of physical or financial assets or reduction in recurring financial liabilities fall under the category of capital expenditure, such expenditures pertain to payments on acquisition of assets like land, buildings, machinery, equipment, etc.

In the era of economic reforms driven on the doctrine of curtailing government expenditure to bring under control deficit financing, the trend, pattern and structure of expenditure and revenue assume special significance. Since the onset of economic reforms in India in 1991, both the central and state governments have been at their best to regulate public expenditure and the state of Punjab is not an exception to it. As mentioned elsewhere, there exists an inherent limitation for the state government to mobilize revenue by opening up newer areas of taxes or income while expenditure has been on the rise on account of increase in revenue expenditure, particularly after the implementation of fifth pay commission states increased its pensions and also implemented welfare scheme for the vulnerable section. As democratic governments are unable to curtail expenditure on service sectors such as education, health and other services, given the revenue and expenditure of the state government reduction in capital expenditure is the way out to match expenditure with income. Continuous fall in development expenditure leave its profound impact on economic health of the state economy in the long run. Against the backdrop that analysis of government expenditure and revenue is undertaken in this chapter. The objective is to study the trends in public expenditure in Primary, Secondary and Tertiary sectors of the economy considering the sources that finance public expenditure for the period 1991-92 to 2011-12. The following table explains the three sectors of Indian economy.

The following table explains the three sectors of Indian economy.

Primary Sector (Agriculture)	Secondary Sector (Industry)	Tertiary Sector (Services)
i) Agriculture ii) Forestry and Logging iii) Fishing	i) Mining and Quarrying ii) Manufacturing iii) Electricity, Gas and Water Supply iv) Construction	i) Trade, Hotels and Restaurants ii) Transport, Storage and Communication iii) Financing, Insurance, Real Estate and Business Services iv) Community, Social and Personal Services

Public Expenditure is divided into two classes i.e., Expenditure of Revenue Account and Expenditure of Capital Account.

Expenditure on Revenue Account

Expenditure on Revenue Account is finances out of the receipts of taxes and other revenues. Revenue Expenditure is incurred for the normal running of government debts and various services, interest charges on debt incurred by Government etc. All grants given to State Governments and other parties are also treated as revenue expenditure. The important heads of revenue expenditure are shown in the budget are as follows:

(i) General Services (ii) Social and Community Services (iii) Economic Services & (iv) Grants- in-aid to States

To understand the real impact of revenue expenditure upon the economy, the expenditure is to break the revenue into development and non-development categories.

i) Development Expenditure on Revenue Account: This expenditure includes expenditure on heads such as education, art, culture and scientific services, medical, family welfare and public health.
ii) Non- Development Expenditure on Revenue Account: It includes expenditure on such heads as audit collections of taxes & duties, interest payments, administrative services such as police, public works, and external affairs. It also includes pensions and other retirement benefit grant to State.

Expenditure on Capital Account

Expenditure on capital account is financed out of the capital receipts such as market loans, borrowings by government and recoveries of loans. It consists of expenditure used for the acquisition of assets like land & building, machinery. The important heads of capital Expenditure as shown in the budget are

(i) General Services (ii) Social and Community Services (iii) Defense Services (iv) Economic Services (v) Loans and Advances to the states.

To understand the real impact of Capital Expenditure on economy is made to break the capital expenditure into development and non-development categories.

i) Development Expenditure on Capital Account: It refers to the expenditure on
   a) Social & Community Services
   b) Economic Services
   c) Loans & Advances to States
   d) Loans & Advances to finance public enterprises.

ii) Non-Development Expenditure on Capital Account: Non-Development Expenditure on Capital account is the defense expenditure. It also includes expenditure on trading scheme, Currency and expenditure on General Services on Capital account.

The implementation of the objectives of public expenditure (as mentioned above) has led to the tremendous growth in public spending in the state of Punjab. The rapid growth of population, infrastructural requirements, emphasis on social welfare, economic development, the rising prices etc., all have contributed to the conspicuous growth of public expenditure in the state of Punjab.

Table 1: State Budget- Expenditure on Revenue Account (1992-93to2001-02) (Rs.Crore)

	1992-93	**1993-94**	**1994-95**	**1995-96**	**1996-97**	**1997-98**	**1998-99**	**1999-00**	**2000-01**	**2001-02**
Primary Sector	339.95 (9.67)	406.87 (11.23)	376.25 (6.28)	496.4 (9.94)	460.77 (6.65)	581.32 (7.42)	691.78 (8.25)	680.12 (6.67)	831.12 (7.09)	922.47 6.73
i. Agriculture and allied activities	180.18 (5.13)	220.78 (5.46)	190.46 (3.15)	279.16 (5.51)	218.96 (3.16)	279.31 (3.57)	347.21 (4.14)	339.37 (3.33)	448.10 (3.83)	493.13 (3.60)
ii. Rural Development	16.93 (0.48)	29.88 (0.74)	17.95 (0.30)	46.06 (0.91)	24.00 (0.34)	45.56 (0.58)	54.46 (0.65)	46.69 (0.46)	67.25 (0.57)	78.43 (0.57)
iii. Irrigation and Flood Control	142.84 (4.06)	156.21 (3.86)	167.84 (2.77)	171.18 (3.38)	217.81 (3.14)	256.45 (3.27)	290.11 (3.46)	294.06 (2.88)	315.77 (2.70)	350.91 (2.56)
Secondary Sector	121.45 (3.46)	147.71 (4.08)	147.94 (2.47)	207.14 (4.15)	1512.02 (21.83)	1089.07 (13.90)	251.15 (2.99)	627.57 (6.16)	855.34 (7.30)	1014.55 (7.40)
i. Energy	0.64 (0.02)	0.69 (0.02)	0.86 (0.01)	1.08 (0.02)	1338.74 (19.33)	874.45 (11.16)	19.51 (7.77)	404.11 (3.96)	605.01 (5.17)	724.07 (5.28)
ii. Industry and Minerals	38.63 (1.10)	53.52 (1.32)	41.03 (0.68)	44.04 (0.87)	24.31 (0.35)	52.05 (0.66)	38.02 (0.45)	38.16 (0.37)	28.55 (0.24)	42.80 (0.31)
iii. Science Technology and Environment	0.71 (0.02)	0.79 (0.02)	0.93 (0.02)	1.94 (0.04)	0.23 (0.01)	0.59 (0.01)	0.96 (0.01)	0.72 (0.02)	1.54 (0.01)	1.71 (0.01)
iv. Labour and labour Welfare	19.83 (0.560	24.11 (0.60)	26.59 (0.44)	35.88 (0.71)	36.20 (0.52)	43.46 (0.56)	48.44 (0.73)	49.89 (0.49)	52.69 (0.45)	57.34 (0.41)
v. Water Supply, Sanitation, Housing and Urban Development	61.64 (1.75)	68.60 (1.70)	78.53 (1.30)	124.20 (2.45)	112.54 (1.62)	118.52 (1.51)	144.22 (1.72)	134.69 (1.32)	167.55 (1.43)	192.63 (1.40)
Territory Sector	3051.74 (86.86)	3431.86 (94.79)	5471.34 (91.27)	4292.25 (85.92)	4952.88 (71.51)	6164.81 (78.68)	7441.38 (88.75)	8887.29 (87.17)	10025.37 (85.59)	11759.39 (85.85)
i. Organs of state	29.63 (0.84)	34.52 (0.86)	50.20 (0.83)	61.84 (1.220	72.61 (1.05)	81.38 (1.04)	95.93 (1.14)	95.92 (0.94)	106.93 (0.91)	118.14 (0.86)
ii. Fiscal Services	47.94 (1.36)	53.40 (1.32)	79.26 (1.31)	80.63 (1.60)	76.59 (1.11)	89.90 (1.15)	155.51 (1.85)	137.36 (1.35)	157.59 (1.35)	179.24 (1.30)
iii. Interest Payment and servicing debt services	912.63 (25.97)	1042.17 (25.77)	1243.69 (20.58)	881.65 (17.41)	1634.44 (23.60)	1848.76 (23.59)	2316.80 (27.63)	2636.67 (25.86)	2343.27 (20.01)	2973.62 (21.71)
iv. Administration Services	492.64 (14.02)	547.08 (13.53)	668.72 (11.07)	670.70 (13.25)	776.42 (11.21)	963.45 (12.30)	1095.98 (13.07)	1090.69 (10.70)	1178.24 (10.06)	1251.63 (9.13)
v. Pension and Miscellaneous General Services	187.63 (5.34)	198.18 (4.90)	1760.46 (29.13)	673.98 (13.31)	351.84 (5.08)	659.58 (8.42)	721.14 (8.68)	1621.59 (15.91)	2744.78 (23.43)	3482.62 (25.42)

vi. Education, Sports, Art and Culture	621.24 (17.68)	687.68 (17.00)	765.64 (12.67)	923.74 (18.24)	1042.91 (15.06)	1302.36 (16.62)	1715.97 (20.47)	1804.99 (17.70)	1857.96 (15.87)	1903.64 (13.89)
vii. Health and Family Welfare	201.63 (5.74)	222.91 (5.51)	226.17 (3.74)	271.87 (5.37)	314.84 (4.55)	383.23 (4.89)	516.09 (6.15)	544.56 (5.34)	637.59 (5.44)	732.41 (5.34)
viii. Information and Broadcasting	5.89 (0.17)	6.47 (0.16)	7.59 (0.13)	9.98 (0.20)	11.17 (0.16)	11.80 (0.15)	12.23 (0.15)	10.92 (0.11)	10.82 (0.09)	11.62 (0.08)
ix. Welfare of Scheduled Castes, Scheduled Tribes and other Backward Classes	21.63 (0.61)	27.48 (0.68)	39.27 (0.65)	55.58 (1.10)	28.56 (0.41)	48.14 (0.61)	48.44 (1.83)	28.77 (0.28)	46.15 (0.40)	50.43 (0.36)
x. Social Welfare and Nutrition	80.64 (2.29)	106.35 (2.63)	84.40 (1.40)	263.55 (5.210	73.39 (1.06)	149.51 (1.91)	134.14 (1.60)	135.50 (1.33)	212.29 (1.81)	246.41 (1.790
xi. Transport	219.63 (6.25)	252.56 (6.25)	272.74 (0.93)	273.39 (5.40)	321.08 (4.64)	371.13 (4.74)	417.40 (4.98)	458.10 (4.49)	447.44 (3.82)	463.32 (3.38)
xii. General Economic Services	220.43 (6.27)	238.50 (5.90)	262.21 (4.34)	111.09 (2.19)	154.28 (2.23)	170.44 (2.18)	122.64 (1.46)	256.21 (2.51)	173.60 (1.48)	222.43 (1.62)
xiii. Area Programme	7.41 (0.21)	11.29 (0.28)	7.63 (0.13)	10.41 (0.21)	8.52 (0.12)	9.69 (0.12)	8.46 (0.10)	8.93 (0.09)	13.25 (0.11)	15.03 (0.11)
xiv. Grant-in-aid Contribution	-	-	-	-	66.61 (0.96)	70.30 (0.89)	73.30 (0.87)	50.37 (0.49)	88.80 (0.75)	101.62 (0.740
xv. Others	2.97 (0.08)	3.27 (0.08)	3.36 (0.05)	3.84 (0.08)	19.62 (0.28)	5.14 (0.07)	7.35 (0.09)	6.71 (0.07)	6.66 (0.06)	7.23 (0.05)
	3513.34 (100)	3620.44 (100)	5994.99 (100)	4995.79 (100)	6925.67 (100)	7835.20 (100)	8384.31 (100)	10194.98 (100)	11712.83 (100)	13696.41 (100)

Source: Punjab Budget Document

Table 2: State Budget- Expenditure on Revenue Account (2002-03 to 2011-12) Rs. Crore

	2002-03	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**
Primary Sector	745.71 (5.63)	862.15 (5.79)	969.55 (5.64)	1129.04 (6.20)	1298.57 (5.89)	1295.5 (5.61)	1770.96 (6.63)	1607.36 (5.86)	2244.28 (6.82)	1992.86 (6.03)
i. Agriculture and allied activities	413.35 (3.12)	440.21 (2.96)	471.68 (2.74)	487.32 (2.68)	541.70 (2.460	662.15 (2.87)	864.66 (3.23)	736.29 (2.69)	1205.99 (3.66)	863.86 (2.61)
ii. Rural Development	18.93 (0.14)	23.47 (0.16)	26.99 (0.16)	47.56 (0.26)	152.74 (0.69)	65.68 (0.29)	214.29 (0.80)	102.41 (0.37)	117.39 (0.36)	138.96 (0.42)
iii. Irrigation and Flood Control	313.43 (2.36)	398.47 (2.68)	470.88 (2.74)	594.16 (3.26)	604.13 (2.74)	567.67 (2.46)	692.01 (2.59)	768.66 (2.80)	920.90 (2.80)	990.04 (3.00)
Secondary Sector	1731.22 (13.07)	1974.34 (13.26)	2539.06 (14.76)	1890.81 (10.38)	2491.08 (11.29)	3368.38 (14.60)	3135.73 (11.73)	3320.78 (12.12)	4238.20 (12.88)	4331.12 (13.11)
i. Energy	1481.23 (11.18)	1692.84 (11.37)	2172.94 (12.63)	1551.31 (8.52)	1951.96 (8.85)	2851.07 (12.36)	2606.38 (9.75)	2874.67 (10.49)	3376.24 (10.26)	3200.90 (9.69)
ii. Industry and Minerals	15.03 (0.11)	19.84 (0.13)	22.00 (0.13)	71.10 (0.39)	144.36 (0.65)	128.35 (0.56)	136.45 (0.51)	34.54 (0.13)	109.29 (0.33)	143.44 (0.44)
iii. Science Technology and Environment	0.41 (0.00)	0.72 (0.00)	0.85 (0.01)	2.74 (0.02)	1.05 (0.00)	13.98 (0.06)	12.61 (0.05)	2.21 (0.00)	321.69 (0.98)	421.67 (1.28)
iv. Labour and labour Welfare	44.63 (0.33)	48.51 (0.32)	54.04 (0.31)	58.46 (0.32)	65.92 (0.30)	67.86 (0.29)	81.36 (0.31)	91.05 (0.33)	109.29 (0.33)	143.44 (0.44)
v. Water Supply, Sanitation, Housing and Urban Development	189.92 (1.143)	212.43 (1.43)	289.23 (1.68)	207.26 (1.14)	327.79 (1.49)	307.12 (1.33)	298.93 (1.12)	318.34 (1.16)	321.69 (0.98)	421.67 (1.28)
Territory Sector	11018.42 (83.19)	12332.26 (82.84)	13689.42 (79.60)	15186.82 (83.41)	18275.93 (82.83)	18396.95 (79.79)	21824.55 (81.64)	22479.77 (82.02)	26739.01 (81.28)	27228.73 (82.40)
i. Organs of state	121.38 (0.92)	129.04 (0.87)	136.07 (0.79)	136.78 (0.75)	187.57 (0.85)	185.10 (0.80)	243.35 (0.91)	274.27 (1.00)	335.72 (1.02)	494.11 (1.49)
ii. Fiscal Services	141.54 (1.07)	163.82 (1.10)	182.77 (1.06)	219.16 (1.21)	255.14 (1.16)	216.90 (0.94)	241.97 (0.91)	235.37 (0.86)	355.35 (1.08)	378.65 (1.15)
iii. Interest Payment and servicing debt services	3284.11 (24.79)	3573.63 (24.00)	3981.50 (23.15)	3715.16 (20.41)	4288.47 (19.44)	4526.92 (19.63)	4856.08 (18.17)	5010.99 (18.28)	5515.11 (16.17)	6280.02 (19.00)
iv. Administration Services	987.72 (7.46)	1207.94 (8.11)	1400.88 (8.15)	1690.36 (9.28)	1960.18 (8.88)	2061.74 (8.94)	2474.81 (9.26)	2651.85 (9.68)	3281.17 (9.97)	3922.87 (11.87)
v. Pension and Miscellaneous General Services	3284.05 (24.80)	3705.63 (24.89)	4148.82 (24.12)	4754.79 (26.11)	5699.82 (25.83)	5901.24 (35.59)	6181.10 (23.12)	7352.80 (26.83)	9110.39 (27.69)	5712.30 (17.29)
vi. Education, Sports, Art and Culture	1983.77 (14.98)	2024.62 (13.60)	2113.24 (12.29)	2289.09 (12.57)	2680.36 (12.15)	2673.99 (11.60)	3341.52 (12.50)	3645.24 (13.30)	4086.06 (12.42)	5289.57 (16.01)
vii. Health and Family Welfare	517.24 (3.90)	581.47 (3.90)	603.79 (3.51)	695.85 (3.82)	790.37 (3.58)	756.47 (3.28)	1016.63 (3.80)	980.66 (3.58)	1189.84 (3.62)	1550.79 (4.69)
viii. Information and Broadcasting	10.63 (0.08)	11.44 (0.07)	12.89 (0.08)	15.60 (0.09)	20.51 (0.09)	17.63 (0.08)	32.47 (0.12)	20.38 (0.07)	23.96 (0.07)	31.03 (0.09)
ix. Welfare of Scheduled Castes, Scheduled Tribes and other Backward Classes	14.84 (0.11)	19.63 (0.13)	25.99 (0.15)	82.93 (0.46)	104.06 (0.47)	58.13 (0.25)	252.05 (0.94)	112.98 (0.41)	239.78 (0.73)	285.78 (0.86)
x. Social Welfare and Nutrition	201.47 (1.52)	346.32 (2.32)	428.88 (2.49)	246.50 (1.35)	715.63 (3.24)	438.85 (1.90)	1355.74 (5.07)	1035.32 (3.78)	1273.86 (3.87)	1504.01 (4.55)

xi. Transport	315.63 (2.38)	384.42 (2.58)	443.20 (2.58)	350.77 (1.93)	485.94 (2.20)	363.64 (1.58)	445.12 (1.67)	459.88 (1.68)	508.91 (1.55)	693.07 (2.10)
xii. General Economic Services	100.44 (0.76)	115.63 (0.77)	129.13 (0.75)	609.10 (3.34)	667.18 (3.02)	826.05 (3.58)	506.22 (1.89)	239.96 (0.88)	162.86 (0.50)	319.52 (0.97)
xiii. Area Programme	-	-	-	-	-	-	-	-	-	-
xiv. Grant-in-aid Contribution	49.74 (0.37)	62.43 (0.42)	74.53 (0.43)	372.36 (2.05)	409.34 (1.86)	356.79 (1.55)	861.49 (3.22)	446.91 (1.63)	639.66 (1.95)	746.80 (2.26)
xv. Others	5.86 (0.04)	6.24 (0.04)	7.73 (0.05)	8.37 (0.04)	11.36 (0.05)	13.53 (0.06)	16.00 (0.06)	13.16 (0.05)	16.37 (0.05)	20.21 (0.06)
	13245.36 (100)	14887.25 (100)	17198.03 100.00	18206.73 100.00	22065.58 100.00	23060.83 (100)	26731.24 (100)	27407.94 (100.00)	32897.18 (100.00)	33045.32 (100.00)

Source: Punjab Budget Document

Table 3: State Budget- Expenditure on Capital Account (1992-93 to 2001-02) Rs. Crore

	1992-93	**1993-94**	**1994-95**	**1995-96**	**1996-97**	**1997-98**	**1998-99**	**1999-00**	**2000-01**	**2001-02**
Primary Sector										
i. Agriculture and allied activities	69.43	72.08	229.71	94.86	(-) 504.20	90.19	271.11	(-) 154.49	507.46	552.61
ii. Rural Development	-	-	-	-	-	-	-	-	17.29	19.21
iii. Irrigation and flood control	253.18	283.58	364.33	119.52	111.79	564.23	605.94	363.82	314.14	389.21
Secondary Sector										
i. Energy	-	-	-	0.10	-	-	-	-	-	-
ii. Industry and minerals	10.44	10.95	10.71	18.45	0.95	5.52	1.62	(-) 30.31	9.77	11.21
iii. Power Projects	196.43	208.67	287.85	600.92	222.07	4.31	31.18	31.18	429.13	520.21
Territory Sector										
i. General Services	19.81	20.19	22.42	28.46	32.49	35.39	41.96	37.81	69.79	74.32
ii. Social Services	61.44	65.76	58.58	73.18	28.79	45.58	67.71	41.80	126.26	140.32
iii. Special Area Programme	-	-	2.09	8.35	0.95	2.55	2.45	2.76	11.77	14.21
iv. Transport	29.61	34.53	21.72	41.34	55.46	38.45	63.77	61.27	209.34	221.31
v. Science Technology and Environment	0.64	8.18	0.74	1.35	-	11.02	14.17	0.41	10.96	11.87
vi. General Economic Services	0.06	0.07	1.13	72.13	34.98	176.89	68.73	115.79	116.85	117.32
vii. Others	81.62	87.49	90.70	233.02	206.53	114.41	86.62	100.35	190.07	221.32
	722.66	791.50	1089.98	1291.68	189.81	1088.54	1817.99	575.97	2012.83	2293.12

Source: Punjab Budget Document

Table 4: State Budget- Expenditure on Capital Account (2002-03 to 2011-12) Rs.Crore

	2002-03	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**
Primary Sector										
i. Agriculture and allied activities	10.84	14.83	20.87	10.47	58.52	4.99	21.40	2.62	17.30	0.93
ii. Rural Development	85.52	103.43	156.46	44.96	240.19	101.29	152.20	93.11	303.89	190.17
iii. Irrigation and flood control	183.21	195.21	205.35	304.42	420.46	410.67	542.76	567.44	533.64	301.83
Secondary Sector										
i. Energy	20.31	32.45	72.38	45.28	2.00	44.14	142.52	23.93	-	0.00
ii. Industry and minerals	0.82	1.02	(-) 0.11	5.82	0.28	0.08	20.03	0.25	25.01	2.68
iii. Power Projects	-	43.28	62.38	-	300.00	-	-	-	-	0.00
Territory Sector										
i. General Services	38.24	44.98	50.73	90.20	171.00	135.22	186.91	125.70	184.76	196.04
ii. Social Services	77.65	82.54	91.88	343.99	756.44	490.08	1144.84	699.23	663.46	398.35
iii. Special Area Programme	-	-	-	-	-	-	-	-	-	0.00
iv. Transport	99.87	112.74	132.93	374.45	411.05	902.43	507.23	558.25	583.41	395.91
v. Science Technology and Environment	7.82	8.64	9.17	9.01	39.94	(-)2.75	10.06	-	-	0.00
vi. General Economic Services	18.92	20.96	21.74	288.29	1186.79	105.45	129.98	95.88	72.65	112.21
vii. Others	28.54	31.62	34.42	33.48	185.42	34.85	55.07	28.84	68.40	176.61
	571.74	691.7	858.20	1550.37	3772.09	2226.45	2913.00	2195.25	2452.49	1774.73

Source: Punjab Budget Document

Analysis and Discussion

We have analyzed the data using the graphical tool and linear regression trend to study the variation in the data for each sector. We have divided the data into two decades and compare the investment of the government for the primary sector (Total investment in crore).

Table 5: State Government Expenditure in Primary sector revenue account

Decade I (1992-02)	339.5	406.87	376.25	496.4	460.77	581.32	691.78	680.12	831.12	922.47
Decade II (2002-12)	745.71	862.15	969.55	1129.04	1298.57	1295.5	1770.96	1607.36	2244.28	1992.86

#NA = Not available (Not used in the graph)

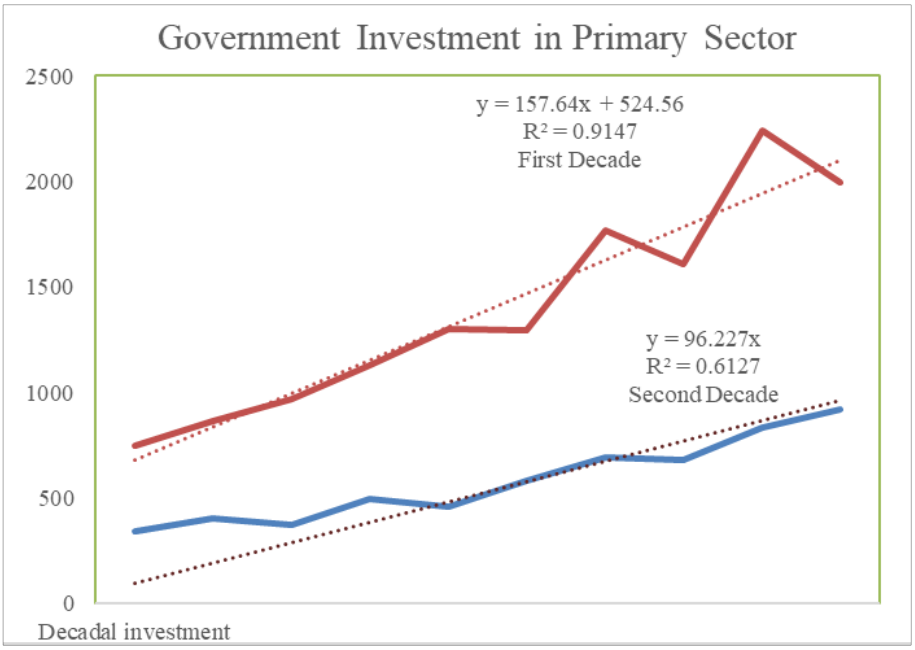

Fig 1: Total investment in the primary sector

First decade (1992-2002) shown by blue line and the dotted line represents the regression line of fit.

The regression line obtained is y = 157.64x + 524.56 where slope of the line is 157.64 and intercept is 524.56. R^2 = 0.9147 which shows that 91.47% variation is measurable.

Decade (2002-2012) The red line shows the trend in the second decade. Dotted line is the fitted trend line. The fitted line is y = 96.227x; where 96.227 is the slope of the line and intercept is zero. R^2 = 0.6127 which signifies that the 61.27% variation is measurable. Which is a good result.

Comparing the decadal investment of the government in the primary sector (total) shows that the investment in the first decade is quite small, the investment increased in the second decade linearly but there is some fluctuations in the line shows the ups and downs in the investment.

Table 6: State Government Expenditure in Secondary sector revenue account

Decade I	121.45	147.71	147.94	207.14	1512.02	1089.07	251.15	627.57	855.34	1014.55
Decade II	1731.22	1974.34	2539.06	1890.81	2491.08	3368.38	3135.73	3320.78	4238.2	4331.12

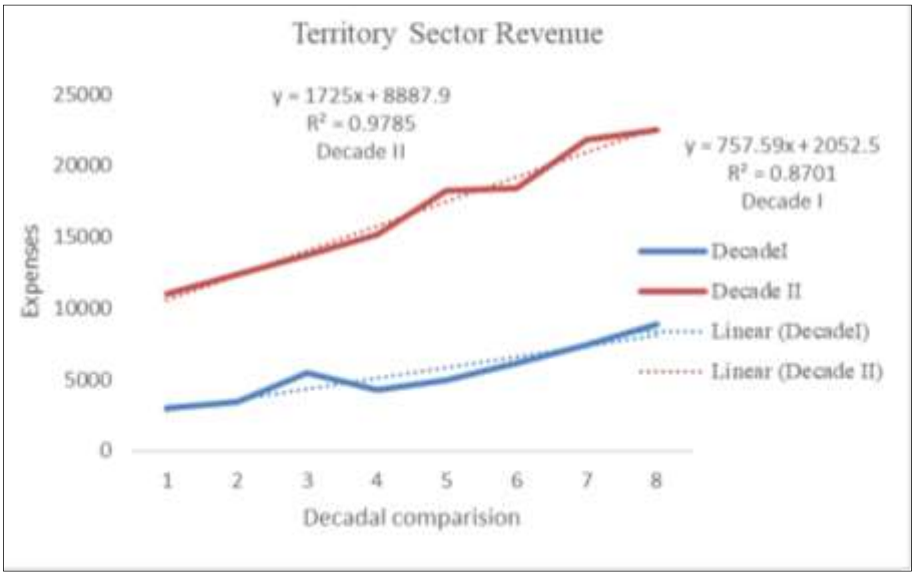

Fig 2: Total investment in the secondary sector

Graphical comparison shows the decadal invest of the government in the secondary sector.

In the first decade the investment in somewhat exponential because some part of the graph is linear and some part shows the exponential trend. In the mid of the decade government increased the expenses in the secondary sector and thereafter the investment followed the linear trend for the rest of the period. If we represent this in a equation form then $y = 111.31e^{0.2356x}$ and R^2 = 0.5408 which shows that the 54.08% variation is measurable which is quite good.

For the second decade the trend equation is y = 289.5x + 1309.8is showing the linear increment in the expenditure with R^2 = 0.8831.

Table 3: State Government Expenditure in territory sector revenue account

Decade I	3051.74	3431.86	5471.34	4292.25	4952.88	6164.81	7441.38	8887.29
Decade II	11018.4	12332.3	13689.4	15186.8	18275.9	18397	21824.6	22479.8

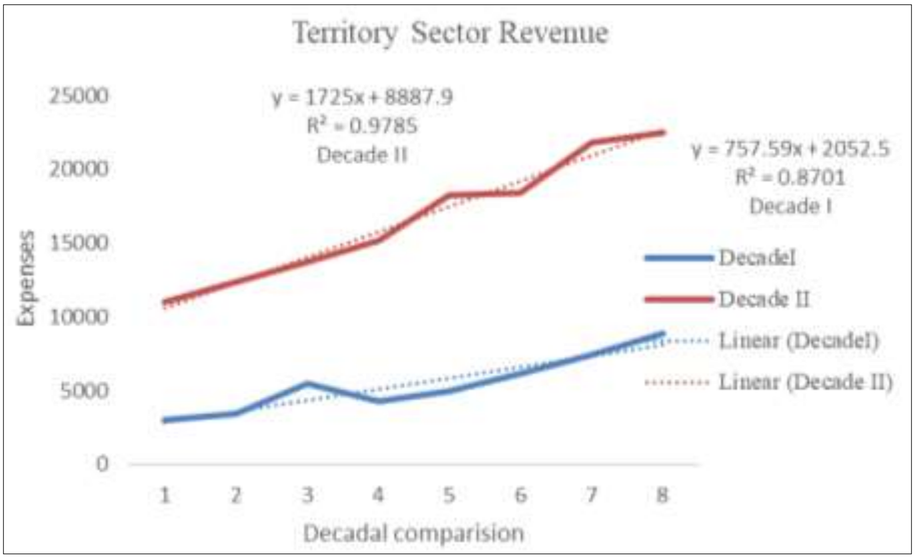

Fig 3: Total investment in the Territory sector

The figure 2.3 depicts the trend of expenditure by the government in the territory sector revenue account. The growth measurement is decadal. For the first decade the trend line is y = 757.59x + 2052.5, R^2 = 0.8701 having intercept 2052.5 and the slope is 757.59. The investment is showing the linear trend for the overall period (1992-2002). For the second decade the trend line y = 1725x + 8887.9, R^2 = 0.9785 which is also linear but the slope is increased. It has the slope 1725 and the intercept 8887.9. In the second decade the government increased the budget for the territory sector.

Summary

The objectives of public expenditure are determined by the existing requirements of the community and the political ideology of the party in power. Hence, the objectives and programmes of public expenditure may differ over the periods. Yet, a general pattern of the objectives of public expenditure are to provide services for the social, economic and physical welfare and security of the people, to promote the most effective utilization of human and other resources, to stabilize the economy, among other things.

In Punjab, the governments have played a major role for well-being of the public as well as for the economic development. Human development was considered an important policy indicator and all the successive governments have invested more on education and public health. Eradication of poverty too was considered as one of the major tasks of the government expenditure and capital expenditure.

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