IJMSRR
E- ISSN - 2349-6746
ISSN -2349-6738

AN ANALYSIS OF INVESTMENT TRENDS AND CAPITAL FORMATION IN INDIAN AGRICULTURE

AparnaPandey*   Dr.Poonam Singh**
**Research Scholar, M.J.P Rohilkhand University, Bareilly, U.P India.*
***Supervisor, Associate Professor S.R.S Girls PG College, Bareilly,U.P India.*

Abstract
Investment in any sector is aimed at generating capital in the form of infrastructure, improving the resources quality, creation of assets and productive wealth. Agriculture is one of the determining factors in the development of human society and continues to play a vital role in our economy. Investment is important factor to promote agricultural sector. The present paper deals with the trends of public and private investment in agriculture sector in India and clarifies the co-partnership between them.It also focused on identifying the determinants and obstacles of the public and private capital formation in this sector. Investment in agriculture has the potential to have significant effect on health, nutrition and poverty reduction. Like all sectors, agriculture also depends on investment for rapid growth.

Keywords: Agriculture, Public and Private Investment, Capital Formation.

Introduction

Agriculture still remains an important sector as it has the most important role in providing employment, income and national food security.Public investment plays an important role in promoting the development of agricultural production as it includes direct expenditure for infrastructure, research and development, education and training etc (Singh 2014). Farmers are struggling with insufficient returns on their produce and this is due to several reasons and an important reason for the rising cost of input reducing earning (Richard Mahapatra 2019). To promote agricultural sector, public and private investment is very important factors. The decline in public investment in agriculture was mainly because a large part of resources going into the current expenditure in the form of subsidies for irrigation, fertilizers, electricity, rural infrastructure, credit and other agricultural inputs in rural areas .

Investment is needed to recover Indian agriculture from its present standstill. Some specific studies have focused that public investment in agriculture has declined at least in last two decades, by Mishra and Chand,19995; Gulati and Bathla, 2001; Rao ,2001; Venkatesha, 2019. The present paper analyses the trend of public and private investment in agriculture sector in India. It also focuses on identifying the determinants and obstacles of public and private capital formation in Indian agriculture and the impact of capital formation on agriculture growth. The present paper is organized into four sections. Section first, show public and private investment trend in Indian agriculture at current prices, Section second, it reflects the public private co-partnership. In section third, it describe the determinants and obstacles for public and private capital formation in Indian agriculture. The last section has been devoted to the conclusion and remarks.

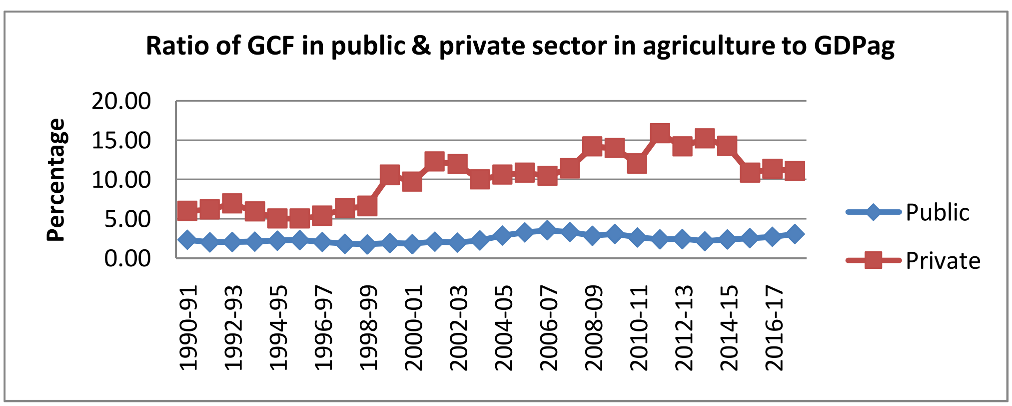
Trends of public and private investment in Indian agriculture

Agricultural growth and public and private investment are directly linked and have strong connection for public policy on resource allotment and reduction in poverty. The share of public investment in total investment come down from 50 percent in the early 1980s to 20 percent in 2000s. The investment growth rate shown that public sector investment recorded a negative growth in the 1980s and 1990s and saw a 15 percent growth rate in 2000s. On the whole, the growth rate of public and private investment is the highest in decades of 2000s. (Sivagnanam&Murugan 2016) .

Gross Capital Formation in Public & Private Sector in Agriculture about Gross Domestic Product in Agriculture at Current Prices (crore)

Years	GDPag	GCFagPU	GCFagPvt	GCFagPUas%GDPag	GCFagPvt.as %ofGDPag
1990-91	154350	3586	9267	2.32	6.00
1991-92	180313	3608	11158	2.00	6.19
1992-93	202219	4116	13997	2.04	6.92
1993-94	234566	4874	13834	2.08	5.90
1994-95	270107	5952	13633	2.20	5.05
1995-96	293701	6678	14900	2.27	5.07
1996-97	353142	7214	18930	2.04	5.36
1997-98	374744	6779	23694	1.81	6.32
1998-99	430384	7476	28570	1.74	6.64
1999-00	455302	8668	48124	1.90	10.57
2000-01	460608	8176	44750	1.78	9.72
2001-02	498620	10354	61342	2.08	12.30
2002-03	485080	9565	57957	1.97	11.95
2003-04	544667	12219	54472	2.24	10.00
2004-05	565426	16187	59909	2.86	10.60
2005-06	637772	20739	69203	3.25	10.85
2006-07	722984	25606	75496	3.54	10.44
2007-08	836518	27638	95679	3.30	11.44
2008-09	943204	26692	133655	2.83	14.17
2009-10	1083514	33237	151289	3.07	13.96
2010-11	1319686	34548	159038	2.62	12.05
2011-12	1499098	35696	238175	2.38	15.89
2012-13	1644926	39743	233747	2.42	14.21
2013-14	1906348	40827	290009	2.14	15.21
2014-15	1995251	47319	284545	2.37	14.26
2015-16	2225368	56167	242388	2.52	10.89
2016-17	2484005	66863	282628	2.69	11.38
2017-18	2594729	78989	287112	3.04	11.07

Source: National Account Statistics, C.S.O., Government of India , Various Issues

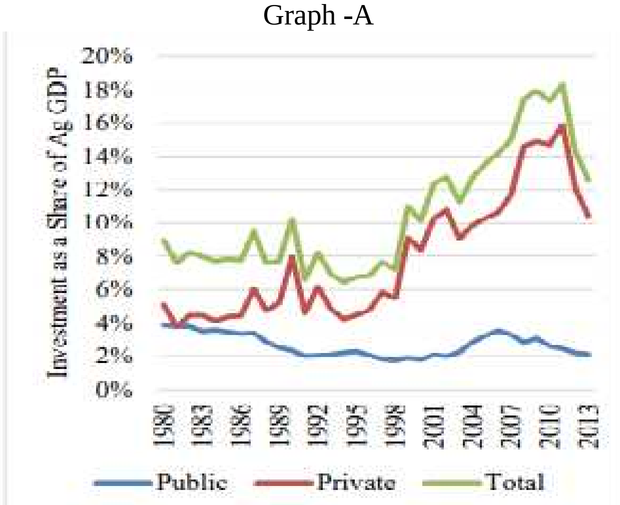


The above table and graph show that the gross capital formation in public and private sector in agriculture &allied sector at current prices which makes it clear that the GDP of agriculture is increasing gradually but the share of agricultural GDP in total GDP has decreased. It has been observed that in the beginning of 1990s gross capital formation of public sector in agriculture is very slow, it was 3586 crore in 1990-91 and 78989 in 2017-18. While the investment of private sector has increasedprogressively . It increased from 9267 crore in 1990-91 to 287112 crore in 2017-18. In promoting the growth of agricultural output, public investment in agriculture has played a vital role because it includes expenditures directed to agrarian infrastructure, research and development and education and training etc.

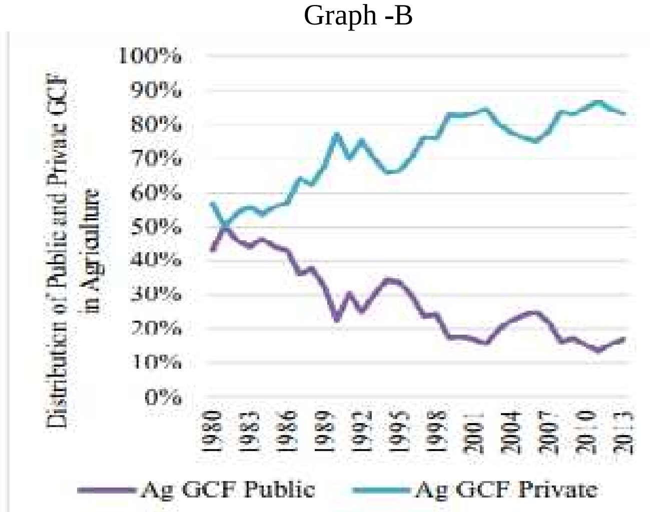
Government should create new policies for corporate world so that they inspire to investment in agriculture sector. Ware house, cold storage, food processing require corporate investment. Under the leadership of Ashok Dalwai the Government appointed committee on doubling the income of the farmer feels that the target is achievable. As stated by the report, the actual income of farming about 60 percent of the total income of a farmer should be doubled. It will change the ratio of income of the farmers, from agricultural and non-agricultural sources from the current 60:40 to 70:30 by 2022, if achieved. (Mahapatra 2019).

The decline in public investment is serious subject. There are many reasons for the decline in public investment in agriculture. Eminent among them are (i) diversion of resources from direct investment to subsidy (ii) increase in sustentation costs of existing projects (iii) delay in completing projects etc.

Graph -A



Graph -B



Source: Macro Ferroni, Yuan Zhou.

The above figure reflect trend of public and private investment in agriculture, at current prices, agriculture is estimated by gross capital formation relative to GDP. It is clear from the graph A, that public investment was close to 4 % of agricultural GDP in 1980. In the early 2000s, when it recovered to an extent, it declined except for one period. Private investment began to grow especially from 1994. It achieved about 16% of agricultural GDP in 2011 but declined to 10% in 2013 due to rising inflation. It is clear from graph B, that in 2013 the private sector accounted for 83% of Gross Capital Formation in agriculture and 17% of the public sector.

Public private co-partnership

Private investment responds to change in the business environment which is the result of many factors. These include government and institutions, an executive regulatory system, respect for property right, law and order, a functioning regulatory system and financial sectors and wide verity of policies. It is absolutely important now the government manages these factors. The choices that are being made are influenced by politics. Indian's well designed and well thought out policies in agriculture have not given the expected results due to lack of ground

IJMSRR
E- ISSN - 2349-6746
ISSN -2349-6738

implementation. Proper regulation and well administered competent policies are strongly needed. Regulatory reform is in many cases successful in the center, but is not yet supported by coherent action across states.

As it is clear from the present research paper that public investment in agriculture is in declined. This is a concern not only for farming but also for the wider rural economy. It is generally believed that public investment in infrastructure, services, roads, connectivity etc. is required to attract private investment. One important reason for declining public investment in agriculture is that it is being displayed by the subsidy being given in the budget especially for fertilizer and electricity. Public sector imbalances are believed to impede the pace of additional private investment, which affects the agricultural growth rate and potential growth rate.

Finally it is notable that government guidance and support is needed to the private sector to continue the agricultural transformation of the country and to carry out its work in a quantitative, comparative and profitable manner. The challenge of the government is to supply the resources in the best way.

Determinants and obstruction for public and private capital formation in agriculturesector

Capital formation depends on profit expectations and it depends on revenue and cost because e prices are affected by agreement on agriculture, naturally the expectation of profit and then capital formation in the agricultural sector would also be affected by the agreement on agriculture (Shailza 2014). Economic development will suffer a setback without adequate ideal capital formation in the agricultural sector.

Determinants of public capital formation

It has been pointed out earlier in figure that the beginning of 1990s gross capital formation of public sector in agriculture is very slow. The behavior of public investment in agriculture is largely influenced by agricultural policies of the time. The reason of this behavior is mainly governed by agricultural policies governed by the food situation of the country and the political economy of the time. Since the 1980s when public investment has fallen drastically. The irony is that due to the success of the green revolution strategy, political economic crisis has arisen which is continuing. Due to compulsion of political economy, investment in private and public sector has declined, although the total public expenditure on agriculture has not actually declined.

Apart from the compulsion of national level agricultural policies and political economy there are some state level determinants of public investment. A study by Rao (2003) concluded that rural population, literacy, GDP of agriculture and grant in aid from the Government has a positive effect in public investment. The major obstacles in capital formation in Indian agriculture are declining public sector investment, weather aberration and production price fluctuations, limited infrastructure for agricultural processing, warehousing, marketing and value addition, poor extension service and lack of effective mechanism for technology transfer.

Determinants of private capital formation

Private sector capital formation is affected by many factors. (i) The flow of institutional credit for agriculture (ii) terms of trade for agriculture (iii) technology flow (iv) investment in agriculture infrastructure by public sector are the main determinants of capital formation in private sector. Institution lending is directly related to private investment. On one hand short term loans have a positive impact on private investment because it improve the farmer's purchasing power,on the other hand long and medium term loans are given for the purchasing ofassets.
By affecting income from agriculture, terms of trade directly affect private investment. As terms of trade improve there is an increase in income and the rate of return on private investment also improves. Thus the terms of trade affect the capital formation of the private sector. Technology also affects private investment. Investment is required by farmers to adopt some new technology but this investment is made on return basis.

To promote participation of private sector, the Government of India has allowed 100 percent FDI in many segments of the agricultural sector. It covers agricultural machinery, fertilizers, horticulture, fisheries and farming of vegetable and fruits. Attracting private sector investment is expected to benefit Indian farmers immensely as most of them engage in small-scale trade and struggle to achieve profitability. (IBEF 2013) Private investment refers to farmer's own investment, including their savings and borrowing from institutional and non-institutional sources. The Ministry of Agriculture estimates that in order to double the income of farmers by 2022-23, private investment in agriculture should increase by two times to about 1,40,000 crore .(Srinivas,Mehta 2018)

Conclusion

Investment is very important not only for the agricultural development but also because of dependency of the economy on agriculture. It should be viewed in the macroeconomic context in which agricultural development occurs. There is a need to use the resources in a systematic way so that in this process the profitability of the private sector as well as the farming community is also benefited. Designing policies and programs to encourage investment in agriculture should be recognized that agricultural development depends on the parallel growth of agricultural production. To fill the investment gap in agriculture, a favorable policy and development support environment has to be prepared by the government for the private sector. It also need to encourage the banking sector, which has potential business opportunities and more investment credit can be expanded in these areas.
It's advisable to have pan India level policies and guidelines to assess the demand and supply at region level and advisory to be given to agriculture sector based on demand for the better profitability to the sector and prevent from the losses of overproduction , uneven distribution and to attract private investment in developing infrastructure, distribution mechanism and investment in agricultural research.

References

1. Agricultural Statistics at a Glance 2018, Ministry of Agriculture & Farmers Welfare, Government of India.
2. Bathala, Seema (2014) "Public and private capital formation and agricultural growth in India; state level analysis of inter linkages during pre and post reform periods", Agricultural Economic Research Review vol.27, no.1, pp 19-36.
3. DeshpandeTanvi (2017) "State of agriculture in India" ,PRS, pp 5-7.
4. Ferroni Marco & Yuan Zhou (2017) "The private sector and India's agricultural transformation", Global journal of emerging market economics, sage publication, pp 1-10.
5. IBEF (2013) "The Indian agriculture sector: investment, growth and prospects" pp- 4-18.
6. Jha, Raghabendra (2007) "Investment and subsidies in Indian agriculture", ASARC working paper, Australian, nation University, Canberra, ACT , Australia, pp 1-10.
7. Mallick, Jagannath (2009) "Trends and pattern of private investment in India" The institute for social and economic change, pp 1-24.
8. Mani Harish, G. Balachandran, V.N. Pandit (2011) "Public investment in agricultural and GDP growth: Another look at the intersectoral linkages and policy implication", working paper no.201, centre for development economics, pp 1-10.
9. Rao, C.H. Hanumantha& S. MahendraDev (2003) "Economic reform and challenges ahead: An overview", economic and political weekly, vol.38, no.12/13 march 22, pp 1130-1141.
10. Singh, Poonam (2014) "Declining public investment in Indian agriculture after economic reforms: An Interstate analysis" Journal of Management & Public Policy Vol.6, no.1, Dec. pp 21-33.
11. SivagnanamK.Jothi, & K. Murugan (2016) "Impact of public investment on agriculture sector in India" ,Vol-XII, no.2, pp 45-51.
12. Sivakumar, Marimuthu (2013) "Gross capital formation and GDP growth in Indian agriculture sector" MPRA paper no.46946, may 13 pp-1-14
13. SrinivasNidhiNath&Puri Mehta (2018) "Agricultural investment: time to cultivate a visible hand", economic times, 13 july.
14. Syed Saifullah and Masahiro Miyazako (2013) "Pronmoting investment in agriculture for increased production and productivity", FAO, Rome Italy pp 8-13.
15. The Indian agriculture sector: investment, growth, and prospects, IBEF 2013 pp 1-7.
16. Venkatesha, T.K (2019) "Public and private investment in Indian agriculture- An analysis" Shanlax International Journal of Arts, Science and Humanities, Vol.6, no.3, pp 72-79.