

Doubling Farmers' Income by 2022: A Critical Appraisal

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ABSTRACT

The programme of Doubling Farmers' Income was announced by the Finance Minister, Mr. Arun Jaitley during his budget speech on February 29, 2016. The targeted year that has been set by the govt. for doubling the farmers income is 2022 i.e. from 2015-16 to 2021-22 (Six years) with the objective to double the real income of farmers, not output or value added or the GDP of the agriculture sector. Targeted income includes income from agricultural as well as allied activities. The level of farmers' income and year to year fluctuations in it are a major source of agrarian distress which is spreading and getting severe over time impacting almost half of the population of the country that is dependent on farming for livelihood. It can cause serious adverse effect on the future of agriculture in the country. To secure future of agriculture and also to improve livelihood, adequate attention needs to be given to improve the welfare of farmers and raise agricultural income. Achieving the goal of Doubling Farmers' income by 2022 help to reduce persistent disparity between farm and non-farm income, alleviate agrarian distress, promote inclusive growth and infuse dynamism in agriculture sector. It will also attract youth towards farming profession and ease the pressure on non-farm jobs.

Keywords: Income, Innovation, Productivity, MSP, e-platform

Agriculture is the mainstay of the Indian economy because of its high share in employment and livelihood creation even though its proportionate contribution to the nation's GDP has been reducing over time. This decrease in agriculture's contribution to GDP has not been accompanied by a matching reduction in the share of agriculture in employment as it can be realized from the fact that half of India's work force is still engaged in agriculture for its livelihood. The availability of land and also of water has become limiting factor in farming for increasing the levels of income and employment. The meager land is not sufficient to earn adequate income to maintain their family. Despite a series of successful

agricultural innovations, fluctuations are there in agricultural output and so in the recent times farming is becoming non-viable and non-farm employment is gaining momentum as farmers are diversifying and seeking employment outside agriculture to tide over the variations in agricultural income. Therefore, to have sustainable livelihood security and to improve the standard of living, the farm families need to generate additional income and employment in a sustainable manner from the available farm resources. Diversification of agriculture is advocated as one of the important strategies to stabilize and enhance farm income, increase employment opportunities and conserve natural resources. The

past strategy for development of agriculture sector in India has focused mainly on raising agricultural output and improving food security by increasing productivity through better technology and varieties; increased use of quality seed, fertiliser, irrigation and agro chemicals; incentive structure in the form of remunerative prices for some crops; subsidies on farm inputs; public investments in and for agriculture and facilitating institutions. One of the drawbacks of the past strategy is that it did not explicitly recognize the need to raise farmers' income and did not mention any direct measure to promote farmers' welfare. The experience shows that in some cases, growth in output brings similar increase in farmers' income but in many cases farmers' income did not grow much with increase in output (Chand, 2015).

The net result has been that farmers' income remained low, which is evident from the incidence of poverty among farm households. There are several reasons for agrarian distress among the farmers such as low level of absolute income; large and deteriorating disparity between income of a farmer and non-agricultural worker and two consecutive drought situations (2014-15 and 2015-16) in several parts of the country.

It is clear that income earned from agriculture is crucial to address agrarian distress so the government needs to proactively address the situation and make more long term farmers centric policies related to irrigation, farm diversification, farm profitability and community support programs so as to socially and economically empower farmers. Thus, came the Prime Minister's dream and Finance Minister's Budget Proposal-2016, now a policy.

MATERIALS AND METHODS

The present study was based on policy framed by Govt. of India and different programmes which are going to be implemented for enhancing the farmer's income. Therefore, the study was exclusively dependent upon secondary data. The data have been collected from various published sources, journals, magazines, annual reports and websites etc. The data was analysed for deriving meaningful conclusions regarding impact and appraisal regarding doubling the farmer's income by 2022.

RESULTS AND DISCUSSION

Prospects

The prospects abound in terms of technologies, institutions and policies, double public investment in infrastructure for agriculture, mass awareness among farmers on schemes and opportunities for commercialisation, diversification, better technologies, facilities, markets, prices, farm inputs and timely delivery at farmer's door steps, synergy among all development programs, departments, states and centre, strengthen marketing reforms, legal framework for marketing of agric. produce, processing industry, retail chain, aggregator and also active involvement of private sector in product market, agro-processing, delivery of inputs, computing and publishing state wise farmers' income on annual basis and make data public, permit leasing of land, remove all restrictions and computerize all land records, creation of Special Agri. Zones with emphasis on export crops, "Gram Panchayats" and Rural Hats as Agri-Business hubs, agriculture particularly post harvest aspects to be included in the concurrent list and speedy implementation of APMC Act in all states. Doubling real income of farmers till 2022-23 over the base year of 2015-16, requires annual growth of 10.41% in farmers' income which means that on-going and previously achieved rate of growth in farm income has to be sharply accelerated (Anonymous, 2016). Therefore, strong measures will be needed to harness all possible sources of growth in farmers' income within as well as outside agriculture sector.

The various sources within agriculture sector includes increase in productivity of crops, increase in production of livestock, improvement in efficiency of input use (cost saving), increase in cropping intensity, diversification towards high value crops, improved price realization by farmers and implementation of MSP to reduce the distress sale. On the other hand the sources outside agriculture sector includes shifting cultivators from farm to non-farm occupations, improvement in terms of trade for farmers or real prices received by farmers, improved value addition and processing and governance related like prioritization of research areas for investment, centre-state linkages, consensus among stakeholders.

Bottlenecks

Firstly reliable, credible farmers' income data does not exist and using available data, studies have shown that farmers nominal income between 1983-84 to 2011-12 multiplied 20 times in nominal terms and by only 3 times in real terms. Also the growth in farmers' income post 2011-12 plummeted to around 1%. About 53% of farm households live in poverty (less than 0.63 ha) if they do not have non-farm income and their consumption expenditure exceeds income and also ₹ 1 invested in farming paid back ₹ 1.7 indicating no squeeze in profitability (Mruthyunjaya, 2017). Another study of 2003-13 indicated that the average total monthly farm income increased by a factor of only 1.34. Among the 4 components of farm income (cultivation, livestock, non-farm business and wages and salaries), only income from animals doubled. The constraints to income growth from non-farm business at the household level, if consumption expenditure is considered (health and education), farmers have no surplus. Also the problems of strong comprehensive policy reforms, ambiguity, scaling up and replicating, sustained political commitment and administrative capacity, failing to deliver uniformly across all the states and diversities.

Challenges

The challenge of climate change is real and there is a crying need to develop a climate-resilient agriculture. Another big issue is cost saving where the approach of developing localized solutions should be adopted as no universal solution works. Information dissemination must be done using digital technology for extensive outreach. Land laws require changes to formalize land leasing practice, in the absence of which term investments are not made by the tillers to enhance production and productivity. Infrastructure creation in connectivity, irrigation, marketing, storage, communication, small farm equipment, etc, is also important for reducing cost of production and improving efficiency. Information technology can contribute enormously in this endeavor by ushering in efficiency of agricultural markets, better price discovery and, above all, transparency. Banks have to finance these measures too. Suitable skill building and enterprise development in the farm and off-farm sector warrants attention. It is an opportune time to move beyond income generation

from farms and focus on reducing post-harvest losses, explore opportunities in allied sector, food processing both at local and regional levels, and off farm income complementarities. Doubling farmers' income needs funds at institutional level as well as at enterprise level, for which a robust institutional credit flow mechanism is a must. There is a need to create a healthy credit environment by enhancing access to credit through technology in an equitable manner. Our resource-scarce farming community such as small and marginal farmers, tenant farmers, share croppers, etc, and farmers in east, centre and northeast regions deserve special attention.

Since the beginning of economic reforms in 1991, growth in agricultural GDP has shown high volatility. It has fluctuated from 4.8% per annum in the Eighth Five Year Plan (1992-96) to a low of 2.4% during the Tenth Plan (2002-06) before rising to 4.1% in the Eleventh Plan (2007-12), as shown in Fig. 1.

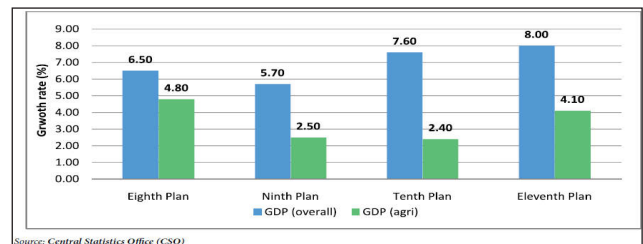


Fig. 1: Agricultural Growth Rate during Different Plan Periods

In response to changing dietary patterns, the composition of agricultural production has diversified over the years. As a result, the horticulture and livestock sectors have emerged as major drivers of growth in the agricultural and allied sector. On the production and productivity front, the horticulture sector outperformed conventional food crops. Between 2004-05 and 2014-15, horticultural output achieved an annual growth of about 7% as compared to around 3% growth in food grain production (Fig. 2).

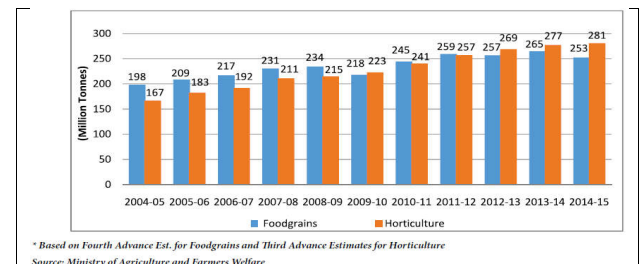


Fig. 2: Trend in Food grain and Horticulture Production

In total horticulture production of 277.7 million tonnes vegetables accounted for 60% followed by fruits 31% (2013-14).

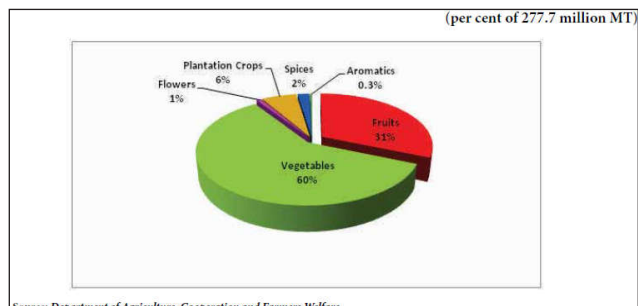


Fig. 3: Share of Different Commodity Groups in Horticulture Production

As reflected in Table 1, during 2014-15, manufacturing of food products and beverages performed much better than the overall manufacturing sector as well as the industrial sector as a whole. The distribution of quality seeds (Fig. 4) for major crops such as cereals, pulses, oilseeds and fibres have shown increase over the years with 64% increase in seeds distribution of cereals, 97% for pulses, 25% for oilseeds and 47% for fibres.

Table 1: Growth in Industry (2012-13 to 2014-15)

Industrial Sector	Year		
	2012-13	2013-14	2014-15
Food product	2.9	-1.1	4.7
Manufacturing	1.3	-0.8	2.3
All Industry	1.1	-0.1	2.8

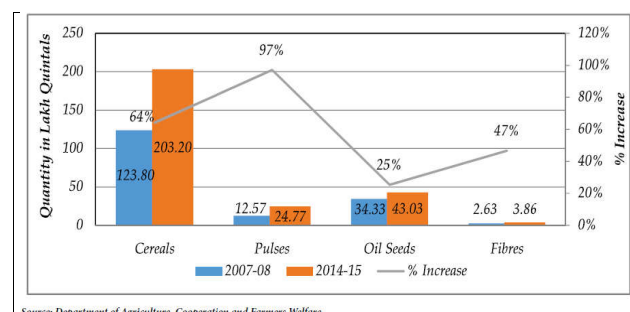


Fig. 4: Distribution of Certified/Quality Seeds for Major Crop Groups

The consumption of fertilizers such as urea, DAP, MOP, NPK (Table 2) complex and overall consumption has shown increase over the years from

1990-91 to 2014-15. The consumption of DAP and SSP have attained highest figures in the year 2012-13 with 91.54 and 40.30 lakh tonnes respectively. The overall consumption of NPK fertilizers have also attained highest figure (131.36 kg/ha) in the year 2012-13.

Table 2: Consumption of Fertilizers in India

Fertilizers	1991-92	2000-01	2012-13	2013-14	2014-15
Urea	140.04	191.86	300.02	306.00	306.10
DAP	45.18	58.84	91.54	73.57	76.26
MOP	17.01	18.29	22.11	22.80	28.53
NPK Complex	32.21	47.80	75.27	72.64	82.78
SSP	31.65	28.60	40.30	38.79	39.89
Consumption of Fertilizer, NPK (kg/ha)	69.84	89.63	131.36	118.55	128.08

The graph for year wise targets and achievements of institutional agricultural credit (Fig. 5) depicts that not just the flow of credit has increased over the years but has also exceeded the targets.

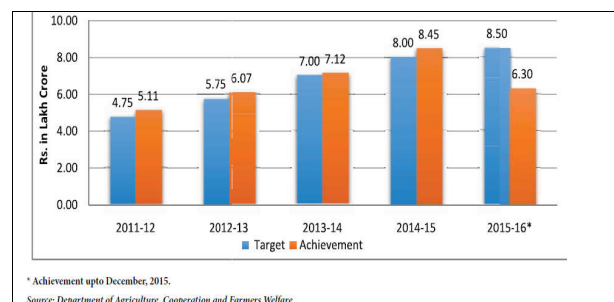


Fig. 5: Year-wise Targets and Achievements of Institutional Agricultural Credit

It is clear from the figure (Fig. 6) that the share of agricultural workers in the total workforce has decreased from 58.20% in 2001 to 54.60 in 2011. Also the share of agricultural GDP is on downfall.

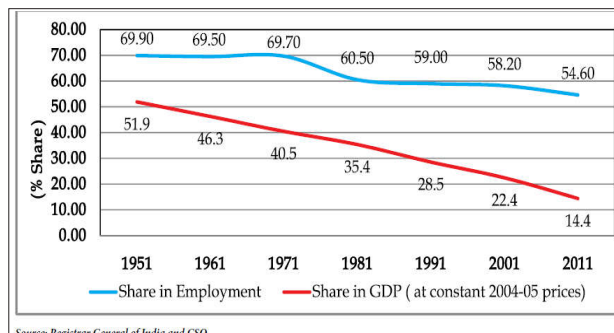


Fig. 6: Share of Agriculture and Allied Sector in Employment and GDP

Table 3: Agricultural Household Income

Components of income	Current prices (₹)		Constant prices at (2011-12) prices (₹)		Growth rate (%)	
	NSSO 50 th Round (2002-03)	NSSO 70 th Round (2012-13)	NSSO 50 th Round (2002-03)	NSSO 70 th Round (2012-13)	NSSO 50 th Round (2002-03)	NSSO 70 th Round (2012-13)
Cultivation	11455	36950	21830	33383	12.4	4.3
Livestock	1189	10016	2266	9049	23.8	14.9
Non-farm business	2786	6209	5309	5610	8.3	0.6
Wages & salary	9840	24801	18753	22407	9.7	1.8
Total annual income	25270	77976	48158	70449	11.9	3.9

Table 4: Past Trend in Farmers' Income in India

Year	Total farm income of all farmers' (₹ Crore)		Cultivators (Number in crores)	Farm income per cultivator (₹)	
	Market price	Real prices		Current price	Real prices
1993-94	1.77	3.03	14.39	12365	21110
1999-00	3.35	3.72	13.88	24188	26875
2004-05	4.34	4.34	16.61	26146	26146
2011-12	11.57	6.32	14.62	79137	43258
2012-13	13.12	5.96	14.36	91416	41553
2013-14	14.77	6.02	14.10	104763	42760
2014-15	15.58	5.97	13.85	112507	43106
2015-16	16.34	5.98	13.60	120193	44027
GR (% per year)	10.61	3.13	—	10.89	3.40

Among the various components (Table 3) of household income, cultivation has remained the major source of income both at current and constant prices for both the rounds of NSSO. The livestock has shown highest growth rate (14.9%) followed by cultivation (4.3%).

The total farm income figures at the market prices has increased from 1.77 crore in 1993-94 to 16.34 crore in the year 2015-16 while farm income in real terms attained highest value in the year 2011-12 i.e. 6.32 crores before reaching down to 5.98 in 2015-16 (Table 4). As far as the farm income per cultivator is concerned it has shown increase both at current prices and at real prices from year 1993-94 to 2015-16.

CONCLUSION

In view of low and unsustainable growth of production and income of farmers, increasing productivity and doubling of farmers' income are necessary to retain farmers in farming and attract youth to agriculture particularly to ensure food security and faster economic growth. Most important is synergy, coordination, collaboration, among all schemes of government departments at all levels, clarity of objectives of interventions, prioritized & focused interventions, scaling up of success, proven examples, regular monitoring of programs and mid-course corrections, improving the development culture, governance and implementation, culture of

accountability for sustainable results and building ownership among all the key stakeholders. Strategy should revolve around increasing productivity, increasing prices, input supply, infrastructure, value chain, market and value chain, credit, insurance. It is no doubt a challenge by 2022 but prospects exist, concerted efforts can significantly enhance if not double.

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